

# PSYCHOLOGICAL ABSTRACTS

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## EDITORIAL NOTE

Beginning with the present issue, the front cover of PSYCHOLOGICAL ABSTRACTS will carry a revised list of *Contents*. Ten years' experience with the practical problem of classifying abstracts, plus the natural growth of the science, have convinced the Editors that some changes should be made from what has been essentially the traditional classification scheme of the PSYCHOLOGICAL INDEX. In the latter publication there was no subject index, and the table of contents had to carry the entire burden of making the subject matter of the various titles cited accessible to the reader. PSYCHOLOGICAL ABSTRACTS issues a subject index with each volume, and the table of contents is thus freed to fulfil its normal function of indicating a convenient grouping of related papers. Some changes have been made because the number of publications on a particular topic, for example statistics or emotion, hardly justifies a separate heading. Other changes have been made in order to avoid separating abstracts on essentially the same problem, as was done when *Memory* was in one place and *Learning* was elsewhere under *Motor Phenomena*. A major change has been the dropping of the heading *Plant and Animal Behavior*. The use of this rubric in the past has resulted in much confusion, because while most animal studies were classified here others were assigned to different sections on the ground that they concerned such topics as the nervous system, receptive processes, or learning. Animal subjects are so widely used by psychologists that to segregate all of them in a separate section seems no longer practical or justifiable. Hereafter abstracts of work dealing with animals will be classified under the problem investigated. There remains, however, the section on *Childhood and Adolescence*, in which abstracts dealing with a certain part of the human life span will continue to be placed irrespective of the problem concerned, whether it be sensation, learning, growth, or the nervous system. Practical considerations seem to justify this procedure at the present time.

## THE EDITORS

### GENERAL

(incl. Statistics)

1. Adams, H. F. *Validity, reliability, and objectivity*. *Psychol. Monogr.*, 1936, 47, 329-350.—A "chaotic impression" is obtained by an examination of the various meanings assigned in the literature to the terms reliability, validity, and objectivity. An analysis of these concepts shows that each should be divided into a qualitative and a quantitative aspect. The author proposes to let the concepts reliability, validity, and objectivity denote qualities and to add

the quantitative concept of accuracy. "When a test measures a function, simple or complex, as completely as possible, it is a valid measure of that function regardless of whether it measures with high or low accuracy." Reliability "is associated fundamentally with absence of systematic errors." "Objectivity exists only when all errors of measurement are random." Accuracy is quantitative, not qualitative. It indicates the degree or amount of correspondence between two phenomena and is expressed by a single coefficient. "Adding the concept of accuracy to those of validity, reliability, and objectivity permits us to describe certain of the necessary features of tests unambiguously." 21 references.—K. F. Muenzinger (Colorado).

2. Berkson, J. *Significant figures in statistical constants*. *Science*, 1936, 84, 437.—The author comments the points brought out in an earlier article of the same title by E. B. Roessler which appeared in *Science*, 84, 289-290. Speaking from his experience in dealing with constants necessary to use in solving simultaneous equations, however, the author cautions against attempting to set up an arbitrary rule by which one may determine in advance the number of decimal places to retain in computations.—F. A. Mote, Jr. (Brown).

3. Best, R. T. *The stereoscope*. *Amer. J. Optom.*, 1936, 13, 290-295.—A short review of the history, development, and optical principles of the stereoscope.—R. J. Beitel, Jr. (American Optical Company).

4. Brewster, J. M. *A behavioristic account of the logical function of universals. II*. *J. Phil.*, 1936, 33, 533-548.—In the behaviorism of G. H. Mead a gesture becomes a symbol when it affects oneself as it affects another. Spoken words and hand gestures can thus affect self and others simultaneously. But Mead's account fails to note that gestures serve as significant symbols when the meaning and referent are different for the two or more members of the group. He has failed to explain how an idea can be common to a group. In a game a gesture on the part of one calls out alternative responses in the one who makes the gesture and the other players. These simultaneous alternative responses begun by each player constitute the idea common to the group and enable each to control his play with respect to the whole game. Similarly the universal character of any symbol is found in alternative responses.—E. T. Mitchell (Texas).

5. Butler, J. R., & Karwoski, T. F. *Human psychology*. New York: Pitman Publ. Corporation, 1936. Pp. 447. \$2.50.—This book, containing 14 chapters, is an introductory text intended to acquaint the student "with the inherited equipment of man and his nervous physiology on the one hand and with

- the behavior of related animals on the other as a preparation for human understanding." A summary is given of the knowledge of the inherited tendencies and capacities of man, the general facts of the nervous system and the sense organs, the higher mental processes, the complicated adjustments involved in perception, attention and learning, and the fine adjustments involved in thinking, feeling, emotion and motivation. Man is considered as an organism and an effort is made to achieve an understanding of human reactions in the light of the varied aspects of daily routine life, with an effort to explain past behavior and perhaps to predict future behavior.—*M. H. Erickson* (Eloise Hospital).
6. Castagnari, G. Mariano Luigi Patrizi. *Necrologia*. (M. L. Patrizi. Obituary.) *Arch. Sci. biol., Napoli*, 1935, 21, 434-440.—Description of the life and scientific work of Patrizi in pure physiology, psychophysiology, criminal anthropology, and the history of biology and medicine.—*G. M. Hirsch* (Rome).
7. Collier, R. M. An inexpensive complication device. *J. gen. Psychol.*, 1936, 15, 221-223.—A large hand is driven around a 12-inch dial by a phonograph motor. Contacts behind the dial may be adjusted to sound a bell as the hand passes any desired point. The apparatus is described and pictured.—*H. Schlosberg* (Brown).
8. Colucci, C. Luigi Mariano Patrizi (1866-1935). *Rif. med.*, 1935, 50, No. 39.—Obituary.—*G. M. Hirsch* (Rome).
9. Craig, C. C. Sheppard's corrections for a discrete variable. *Ann. math. Statist.*, 1936, 7, 55-61.—A method of shortening the steps and simplifying the derivation of the corrections for eliminating systematic errors due to grouping in the moments of a discrete variable is presented.—*J. W. Dunlap* (Fordham).
10. Dodge, H. L. [Ed.] Abstracts of theses for higher degrees in the Graduate School of the University of Oklahoma for 1933. *Univ. Okla. Bull.*, 1936, N. S. No. 665. Pp. 154.—Theses of interest to psychologists include: Daily, C. F., A study of the individual differences of the children of a small school system; Greenlee, W. W., A survey of adolescent problems in a junior high school; Hodge, O., Variations in capacities of school children in communities of different types of environment; Shinn, B. C., A measure of cheating by college students on the grading of their own examination papers; Steele, A. G., The use of mental tests as an aid in guidance; Buntin, L. A., The effects of the habitual use of nicotine upon the basal metabolic rate of college women; and Waldrip, J. B., A comparison of the aesthetic theories of Schopenhauer and Santayana. Copies of these theses are on file in the Library of the University of Oklahoma.—*M. O. Wilson* (Oklahoma).
11. Drabovitch, W. Comment s'adapter à la vie. *Essai de psychologie pratique*. (How to adapt oneself to life. Essay on practical psychology.) Paris: Alcan, 1936. Pp. 172. 15 fr.—The author discusses the following subjects: modern psychology and its applications; professional orientation, its importance and inadequacy; plasticity as a factor in success; personality, will, and timidity; work; and rest. The usefulness of the book as a basis of self observation is emphasized.—*M. H. Piéron* (Sorbonne).
12. Drabovitch, W. Freud et Pavlov. (Freud and Pavlov.) *Evolut. psychiat.*, 1935, No. 3, 21-35.—The author's thesis is that these two men, whose intellectual positions are so clearly in opposition, have had fundamental ideas which are singularly alike. Their neuropsychological concepts are nearly the same, being dynamic concepts which do not exclude, however, mechanistic explanations from being present along with a psychological interpretation.—*M. H. Piéron* (Sorbonne).
13. Educational Press Association of America. Twelfth yearbook. Washington: Comm. on Standards, Educ. Press Ass. Amer., 1936. Pp. 31.—This yearbook contains principally a classified list of educational periodicals and a list of 60 educational books of 1935.—*F. A. Mote, Jr.* (Brown).
14. El Shanawany, M. R. An illustration of the accuracy of the chi-square approximation. *Biometrika*, 1936, 28, 179-187.—*E. R. Henry* (New York University).
15. Feigenbaum, D. In memoriam: Montagu David Eder, M.D. (1866-1936). *Psychoanal. Quart.*, 1936, 3, 444-446.—A brief summary is given of his life, his activities as a Zionist and his contributions to psychoanalytic theory and technique, with mention of his more noteworthy papers and a tribute to his personality. A full page portrait is given.—*M. H. Erickson* (Eloise Hospital).
16. Foulquie, P. Précis de philosophie à l'usage des candidats au baccalauréat. Tome I. Psychologie. (Summary of philosophy for the use of candidates for the baccalaureate degree. Vol. I. Psychology.) Paris: Librairie L'Ecole, 1936. Pp. 315.—A concise but clear manual, which contains portraits of the principal French psychologists.—*M. H. Piéron* (Sorbonne).
17. Frank, C. La nuova eugenica. Manuali pratici di medicina biopsicologica. (The new eugenics. Practical manuals of biopsychological medicine.) Rome: Ferri & Tinto, 1935. Pp. 132. L. 9.—The doctrine and hypotheses of eugenics. The theories of Lamarck, Goethe, Darwin, Haeckel. The biopsychological doctrine as a new system of natural philosophy. Biopsychological terminology.—*G. M. Hirsch* (Rome).
18. Granger, F. Aristotle's theory of reason. II. The poetic reason. *Mind*, 1936, 54, 450-463.—Discussion of various factors, both historical and logical, entering into Aristotle's theory of the poetic reason.—*H. Helson* (Bryn Mawr).
19. Hunt, T. Measurement in psychology. New York: Prentice-Hall, 1936. Pp. xx + 471. \$3.00.—"This book is designed primarily as a textbook for college courses in psychological tests and measurements. The aim has been to give a brief survey of the whole field of psychological testing." "A basic theme of the book is that quantitative study and measure-

ment are just as pertinent to psychological pursuits as to other scientific pursuits." It is divided into the following sections: the place of measurement in psychology, measurement of intellectual qualities, measurement of aptitudes, measurement of achievement, measurement in industrial and personnel fields, measurements of the more general traits of personality, and physiological measurements in psychology. Typical techniques and tests in each of these fields are described, together with their history, results, significance, and applications.—*H. Schlosberg* (Brown).

20. **Jenkins, T. R.** *A direct reading chronoscope with accessories and operating panel.* *J. exp. Psychol.*, 1936, 19, 630-652.—Detailed description with wiring diagrams of a portable and flexible timing system for graduate and undergraduate work. The apparatus contains certain novel features, including an operating panel which furnishes a means for a wide variety of timing experiments without necessitating extensive wiring operations on the part of the experimenter.—*H. W. Karn* (Pittsburgh).

21. **Klages, L.** *Der Geist als Widersacher der Seele.* (The mind as opponent of the soul.) Leipzig: Barth, 1929. Pp. 1429.—This appears in three volumes: (1) *Leben und Denkvormögen*; (2) *Die Lehre vom Willen*. These two were published in 1929, the first for 21.60 RM, the second for 13.50 RM. (3), *Die Wirklichkeit der Bilder*, was published in 1932, for 29 RM.—*G. F. J. Lehner* (Brown).

22. **Klages, L.** *Die psychologischen Errungenschaften Nietzsches.* (The psychological achievements of Nietzsche.) Leipzig: Barth, 1930. Pp. 228. RM. 7.20.—*G. F. J. Lehner* (Brown).

23. **Klages, L.** *Die Wissenschaft am Scheidewege von Leben und Geist.* (Science at the crossroads of life and mind.) Leipzig: Barth, 1932. Pp. 252. RM. 14.—This is edited by H. Prinzhorn in honor of the 60th birthday of Klages.—*G. F. J. Lehner* (Brown).

24. **Korzybski, A.** *Neuro-semantic and neuro-linguistic mechanisms of extensionalization. General semantics as a natural experimental science.* *Amer. J. Psychiat.*, 1936, 93, 29-38.—"General Semantics is described as a General Theory of Values, and every psycho-logical reaction (semantic reaction) turns out to be an *evaluating* reaction of a non-elementalistic character which does not involve the splitting of semantic reaction into 'intellect' and 'emotions'." "General Semantics because of extensional (physico-mathematical) methods" enables us to apply scientific methods to ourselves—on the white level—and thus requires a complete revision of existing doctrines. General Semantics introduces "degrees of conditionality." Animal "signal" reflex reactions and human "symbol" reactions are sharply discriminated. "Once General Semantics is applied, and we concentrate on *evaluating* reactions, many issues become workable" such as "morals, honesty," etc. Predictability is impossible while our orientations are "hopelessly intensional."—*R. Goldman* (Boston Psychopathic Hospital).

25. **Kullback, S.** *A note on the multiple correlation coefficient.* *Metron*, 1936, 12, 67-72.—Derivation of the various estimates of variance for analysis of the multiple correlation coefficient from uncorrelated material without introducing any arguments involving the number of degrees of freedom.—*E. R. Henry* (New York University).

26. **Lewin, K.** *Principles of topological psychology.* New York: McGraw-Hill, 1936. Pp. 231. \$2.50.—This is an attempt to develop a system of uniform mathematical concepts which would be equally applicable to all fields of psychology and which could "represent the various psychological processes not as single isolated facts but in their mutual dependence as expressions of a concrete situation involving a definite person in a definite condition. . . . These concepts must include both law and individual case." The book has two parts. The first, dealing with "The Task of Psychology and the Foundations of Topological and Vector Psychology," is devoted to such fundamental problems as the nature of a law, the concept of causality, the psychological and physical world. Particular attention is given to a discussion of the life space, i.e. "the totality of facts which determine the behavior of an individual at a certain moment." It finds its mathematical representation in the topological space. The second part of the book is entitled "Topological Psychology." First some topological concepts which are essential for psychology are introduced, such as the concepts of region, boundary, path, etc. Then the topology of the psychological environment is discussed from the point of view of locomotions and communications among different regions, the properties of boundaries of psychological regions, the relative position of two regions, and the structural changes. Further, the topology of the person is considered. A short chapter on the "Dimension of the Life Space" concludes the second part. A glossary and index are included.—*M. Rickers-Ovsiankina* (Wheaton).

27. **Liddell, H. S.** *Pavlov's contribution to psychology.* *Psychol. Bull.*, 1936, 33, 583-590.—The course of Pavlov's career is compared with that of behaviorism, and the similarity between Pavlov's viewpoint and Watson's is emphasized. In a sketch of the development of Pavlov's scientific thinking, Liddell indicates that Pavlov preferred the secretory to the motor response because of its greater simplicity. Pavlov's contribution to psychology lies in his motivation of many young psychologists and in his conditioned reflex theory.—*R. H. Brown* (Yankton).

28. **Luh, C. W., Sun, K. H., & Chou, S. K.** [Eds.] *The Chinese journal of psychology.* Peiping: Yenching University. Vol. 1, No. 1, September 1936. Quarterly. \$2.00 per volume.—*R. R. Willoughby* (Brown).

29. **Marzi, A.** *L'ottavo convegno degli psicologi italiani a Roma.* (The eighth congress of Italian psychologists at Rome.) *Riv. Psicol. norm. pat.*, 1936, 32, 118-126.—A summary of the proceedings

of the congress held April 3-5, 1936.—*T. M. Abel* (Trade Extension Classes, N. Y. C.)

30. McDougall, W. Dynamics of the Gestalt psychology. Part III. *Character & Pers.*, 1936, 5, 61-82.—Lewin's concept of dynamics in psychology in terms of vectors and valences is fictitious and misleading. It answers adequately none of the following questions: (1) How does a need in *S* (organism) endow *G* (goal-object) with valence? (2) How does the force emanating from *G* find *S*? (3) In Galileian terms, why is not the attraction between *S* and *G* reciprocal? (4) What is the nature of the change in *S* that causes *G* to send out the force that in turn draws or repels *S*? It does have one great merit, namely, the recognition of certain great springs of energy within the organism, which is the fundamental truth on which McDougall bases his explanation of the dynamics of mental life and behavior. (For previous instalments see X: 3821, 4339.)—*M. O. Wilson* (Oklahoma).

31. Michel, V. The mind-body problem. *Phil. Rev.*, 1936, 45, 611.—The author objects that Pratt enumerates only three alternatives, interaction, materialism, and parallelism, overlooking the traditional scholastic solution, hylomorphism.—*M. F. Martin* (West Springfield, Mass.)

32. Moore, J. S. Some neglected alternatives to Pratt's mind-body theory. *Phil. Rev.*, 1936, 45, 609-611.—The author contends that Pratt stretches the term *dualism*, overlooks the double-aspect theory, uses the word *causal* confusingly, and entirely misconceives panpsychism; but he accepts "the fundamental soundness of Professor Pratt's summary of the mind-body problem" and "his conclusion that the situation is not merely a matter of psychical and physical states, but involves the acceptance of a real and active self."—*M. F. Martin* (West Springfield, Mass.)

33. Newhall, S. M. An instrument for color stimulation and measurement. *Psychol. Monogr.*, 1936, 47, 199-216.—The apparatus described "was devised for investigating color perception, adaptation, after-images and allied transient phenomena. It also functions as a colorimeter involving the mixing of red, green, and blue lights in various proportions to produce light of desired color. This variable mixture of the instrumental primaries supplies part of the field viewed by the observer, while an adjacent part is supplied by variable light from a standard source." This permits one to specify the color of a piece of paper, for instance, in terms of the calibrated instrument. "The order of precision of measurement has been estimated by computing standard errors from data secured under relatively favorable conditions."—*K. F. Muenzinger* (Colorado).

34. Pearson, K. Method of moments and method of maximum likelihood. *Biometrika*, 1936, 28, 34-59.—Pearson shows, by recomputation of certain data of Fisher and his students, that his own method of fitting curves by the method of moments is superior to Fisher's method of maximum likelihood. Fisher had attempted to show, earlier, that Pearson's method

was "a waste of time."—*E. R. Henry* (New York University).

35. Royer, E. B. A formula for intercorrelations among multiscores. *J. educ. Psychol.*, 1936, 27, 457-466.—A formula is derived for estimating the correlation to be expected between scores obtained by scoring a set of papers more than once, as in scoring the Bernreuter personality inventory. Although Lorge (*J. educ. Psychol.*, 1935, 26, 273-278) used an incorrect formula in substantiating his criticism of the Bernreuter inventory because of the correlation between the scoring keys, the incorrect formula gave the correct results. This coincidence is explained.—*A. W. Melton* (Missouri).

36. Sato, K. The composition of ages in the psychological societies of Japan and other countries. *Jap. J. exp. Psychol.*, 1936, 3, 147-149.—"The composition of ages in the Japanese Psychological Society resembles most that of America." English summary.—*R. Kuroda* (Keijo).

37. Schoen, M. The physicist's new delusion. *Sci. Mon.*, N. Y., 1936, 43, 358-362.—The article challenges the right of the physicist to speculate as a physicist in extra-physical matters such as philosophy and particularly religion. Furthermore, any speculation in these fields must meet the demands of a rigid discipline which in many instances is not evidenced in the quality of the utterances put forward by some of these scientists. The further point is made that not only are the utterances of some of the physicists on philosophy and religion unscientific, but in view of the emphasis of philosophy on science and the tendency of religion to become a religion of creative experience, these same physicists are neither philosophers nor religious thinkers.—*O. P. Lester* (Buffalo).

38. Shen, C. L. Fundamentals of the theory of inverse sampling. *Ann. math. Statist.*, 1936, 7, 62-112.—This paper is concerned with the problem: knowing the characteristics of a sample, what is the probability that the corresponding characteristics in the parent population do not differ from these by more than a specified amount? The first part of the paper is devoted to developing and selecting certain functions for expressing a given type of distribution. In the second part the basic relations between the moments of the distribution of sampling means and moments of the distribution of the hypothetical means associated with the parent population are treated. The problem of inverse sampling when dealing with a normal population is treated in the third part of the article. In the fourth and last part inverse sampling is discussed for the case of the parent population distributed according to Pearson's Type III function.—*J. W. Dunlap* (Fordham).

39. Starch, D., Stanton, H. M., & Koerth, W. Controlling human behavior: a first book in psychology for college students. New York: Macmillan, 1936. Pp. 638. \$2.90.—"This book aims to bring together psychology and living." After an introduction on "psychology and you" come Part I, controlling the behavior of self (348 pages), Part II, controlling the

behavior of others (218 pages), and the conclusion on the art of living (32 pages). The chapter headings in Part I are as follows: I-want's and determinants of human behavior; controlling routine behavior; control through habits; learning and habits of study; how to think; remembering; how to concentrate for work; how to use one's energies efficiently; controlling feelings and emotions; behavior of self in social contacts; behavior of self toward associates in occupations; selection of vocation; personality; and behavior hygiene. In Part II the chapters are as follows: controlling the behavior of children in the home; controlling the behavior of children at school; vocational and avocational direction; controlling behavior of abnormal people; controlling behavior through personal selling; controlling behavior through advertising; controlling behavior through public speech; controlling the behavior of others through music, art, and entertainment; controlling behavior through religion. There is in addition a chapter here by R. A. Barton on controlling public opinion. The chapters are accompanied by questions and references.—W. S. Hunter (Brown).

40. Swineford, F. Biserial  $r$  versus Pearson  $r$  as measures of test-item validity. *J. educ. Psychol.*, 1936, 27, 471-472.—The writer argues for the use of biserial  $r$  in validating test items, and defends the assumption of a normal distribution even though the items are dichotomously scored. A comparison of the  $r$ 's obtained by the biserial method and the Pearson method from data on 129 test items reveals the important advantage of the biserial  $r$ , namely that it is not affected by extreme values of the difficulty of the item.—A. W. Melton (Missouri).

41. Symonds, P. M. Influence of order of presentation of items in ranking. *J. educ. Psychol.*, 1936, 27, 445-449.—One large group of junior high school pupils ranked 15 items (pertaining to the problems and interests of adolescents) when presented in one order in a column, and another large group ranked the same items when presented in the reverse order. The strength of the tendency to overrank items coming early in the list and to underrank items coming late in the list was found to be directly proportional to the distance of the item from the middle item. The experiment was repeated with teachers college students and the results were verified, thus indicating that the generalization is not markedly affected by the age of the S's. Tables are presented for use in correcting for the effect of order of presentation in ranking.—A. W. Melton (Missouri).

42. Symonds, P. M. Influence of order of presentation of items in ranking. *Psychol. Bull.*, 1936, 33, 603.—Abstract.—R. H. Brown (Yankton).

43. Trainor, J. C. General semantics: an extensional foundation for psychology. *Psychol. Bull.*, 1936, 33, 624.—Abstract.—R. H. Brown (Yankton).

44. Wandrey, C. Ludwig Klages und seine Lebensphilosophie. (Ludwig Klages and his philosophy of life.) Leipzig: Barth, 1933. Pp. 31. RM. .90.—G. F. J. Lehner (Brown).

45. Woodbridge, F. J. E. The problem of consciousness again. *J. Phil.*, 1936, 33, 561-568.—The question "What is consciousness?" is equivalent to "What does it mean to be conscious?" Hence we can avoid the disjunction between consciousness as a stuff and as a function. Being conscious means hearing, seeing, feeling, etc., thinking about sights, sounds, etc., and discussing these things. The only valid problem is that of the origin of consciousness, a problem which breaks up into numerous problems of nature's history and character. Theories of perception turn out to be theories as to what is perceived. Theories of knowledge reduce to the problem of analyzing the conditions which control the elaboration of the data of which we are conscious into systematic expositions.—E. T. Mitchell (Texas).

46. Zubin, J. Note on a graphic method for determining the significance of the difference between group frequencies. *J. educ. Psychol.*, 1936, 27, 431-444.—The author shows that the usual formula for the critical ratio of the difference between frequencies may be replaced to advantage by one which when squared is identical with the value of  $\chi^2$  and is equal to  $N\phi^2$  where  $\phi$  is the Boas-Yule four-fold point correlation coefficient. This second formula for the critical ratio enables a graphic check on the reliability of obtained differences. The method is demonstrated.—A. W. Melton (Missouri).

[See also abstracts 260, 372, 391, 495, 511, 512.]

#### NERVOUS SYSTEM

47. Austregesilo, A., & Fortes, A. B. Syndrome de déséquilibre et ataxie frontale. (The syndrome of disequilibrium and frontal ataxia.) *Encéphale*, 1936, 31, 1-14.—A series of experiments were made on dogs in which the prefrontal lobe was mechanically destroyed by sectioning the nerve mass at the level of the anterior frontal commissure. The authors believe that the frontal lobe is the superior center of regulation of muscular tonus, orientation, and equilibrium, and that it is a superior vestibulo-cerebellar center. 70 titles in the bibliography.—M. H. Piéron (Sorbonne).

48. Bacq, Z. M., Brouha, L., & Heymans, C. Recherches sur la physiologie et la pharmacologie du système nerveux autonome. VIII. Réflexes vasomoteurs d'origine sino-carotidienne et actions pharmacologiques chez le chat et chez le chien sympathectomisés. (Studies on the physiology and pharmacology of the autonomic nervous system. VIII. Vasomotor reflexes of sino-carotid origin and pharmacological effects in the sympathectomized cat and dog.) *Arch. int. Pharmacodyn.*, 1934, 48, 429-456.—(*Biol. Abstr.* X: 15854).

49. Castro, F. de. Note sur la régénération fonctionnelle hétérogénétique dans les anastomoses des nerfs pneumogastrique et hypoglosse avec le sympathique cervical. (Note on heterogenetic functional regeneration in anastomoses of the pneumogastric and hypoglossal nerves with the cervical sympathetic.) *Trab. Lab. Invest. biol. Univ. Madr.*, 1934, 29, 397-416.—(*Biol. Abstr.* X: 15855).

50. Eccles, J. C. The actions of antidromic impulses on ganglion cells. *J. Physiol.*, 1936, 88, 1-39.—The effects of antidromic impulses backfired into the superior cervical ganglion of the cat are studied in detail. The experimental evidence suggests that qualitatively an antidromic impulse has the same action on a ganglion cell as an impulse discharged by that cell. The evidence is against the existence of specific inhibitory fibers. The bearing of these experiments on the action of antidromic impulses on other nerve cells and inhibition in the spinal cord is discussed.—*M. A. Rubin* (Clark).
51. Forbes, T. W., & Bolles, M. M. Wave form of the Tarchanoff response with shock stimuli. *Psychol. Bull.*, 1936, 33, 608.—Abstract.—*R. H. Brown* (Yankton).
52. Gasser, H. S., & Grundfest, H. Action and excitability in mammalian A fibers. *Amer. J. Physiol.*, 1936, 117, 113-133.—Using single fibers in the spinal roots of the cat, it was found that mammalian A fibers show characteristics generally similar to those of the frog. It is demonstrated that the negative after-potential varies with conditions, about a fixed spike. The relatively refractory period is shortened by development of the negative after-potential process so that supernormality is associated with negative after-potential. Subnormality is associated with positive after-potential. Tetanization increases both negative and positive after-potential. Rhythmic after-potential is obtainable in freshly mounted fibers subject to spontaneous discharge. It is held that supernormality is physiological, rather than merely apparent, since it was found one hour after decerebration and in chronic spinal cats. Supernormality can play little part in ordinary volley activity (in normal bodily function) but its importance lies in the fact that recovery of excitability must be greatly hastened by it.—*T. W. Forbes* (Harvard Bureau of Traffic Research).
53. Harrevald, A. van, & Wiersma, C. A. G. The double innervation of the adductor muscle in the claw of the crayfish. *J. Physiol.*, 1936, 88, 78-99.—A method is described for making single nerve fiber preparations of crustacean motor axons. The adductors of the crayfish (*Cambarus clarkii* and *Astacus trowbridgii*) are innervated by two motor axons. Stimulation of one of these axons causes a twitch contraction of the muscle; the other causes a slow contraction. The electrical properties of the two axons are described.—*M. A. Rubin* (Clark).
54. Kibjakow, A. W. Über humorale Übertragung der Erregung von einem Neuron auf das andere. (The humoral transmission of excitation from one neuron to another.) *Pflüg. Arch. ges. Physiol.*, 1933, 232, 432-443.—(*Biol. Abstr. X: 15864*).
55. Kreezer, G. The electric potentials of the brain in the mongolian type of mental defective. *Psychol. Bull.*, 1936, 33, 607-608.—Abstract.—*R. H. Brown* (Yankton).
56. Leegaard, F. Die Wärmebildung des überlebenden Froschrückenmarkes. 2. Weitere Versuche mit direkter elektrischer Reizung. (Temperature distribution in the surviving frog spinal cord. 2. Further investigations with direct electrical stimulation.) *Z. Biol.*, 1935, 96, 339-351.—(*Biol. Abstr. X: 15865*).
57. Liberson, W. Électroencéphalographie transcrânienne chez l'homme. (Cerebral action currents in man.) *Travail hum.*, 1936, 4, 303-320.—A review of the literature on cerebral action potentials. Experimental factors, such as electrodes, their location, and recording devices, are described. The alpha waves as related to different regions of the cranium, the effect on these potentials of tactual, auditory, and visual stimulation, mental activities, drugs, age, pathological conditions, and beta waves are mentioned briefly. Periodicity in the action current is noted. There is a theoretical interpretation of the two types of waves and of periodicity.—*H. E. Burt* (Ohio State).
58. Lindsley, D. B. Brain potentials in children and adults. *Science*, 1936, 84, 354.—54 adults, ages 16 to 64, and over 100 children, ages 1 month to 16 years, were used in this study to compare the brain-potential activity in adults with that of children. Observations lead the author to conclude that rhythmic waves first become manifest between 3 and 6 months, and the waves gradually increase in frequency with age until adult frequency level is reached at about 8 to 10 years. The children's wave frequencies begin at a range of 3.5 to 4 per sec. and increase to the adult level of 8 to 12.—*F. A. Mote, Jr.* (Brown).
59. Marsalet, P. D. Lobe frontal et équilibre. (The frontal lobe and equilibrium.) *Encéphale*, 1936, 31, 15-91.—The functions of the frontal lobe can be divided into two parts: a process of orientation (external, where the external environment is concerned, and internal, where the different segments of the body are actively in relation to one another); and a process of coordination which concerns the general static condition, kinetics of locomotion, and differentiated kinetics of manual acts, such as writing and verbal articulation. The author describes his results on the role of the frontal lobe in equilibrium from the experimental, clinical, and anatomical points of view. 212 titles in the bibliography.—*M. H. Piéron* (Sorbonne).
60. Minkowski, M. Essai d'analyse et de synthèse biologiques des troubles organiques et fonctionnels en neurologie. (An attempt at biological analysis and synthesis of organic and functional disturbances in neurology.) *Evolut. psychiat.*, 1935, No. 1, 3-37.—*M. H. Piéron* (Sorbonne).
61. Niessl v. Mayendorf, E. Das Gehirn eines Opernsängers. (The brain of an opera singer.) *Rev. Neurol. Psychiat., Praha*, 1936, 33, 194-213.—A short professional and medical history of an opera singer is given in the introduction. He was a tenor, and died at the age of 75; he was perfectly well until about four months before death, when he began to have periods of confusion and erratic behavior. He was conspicuous by his extraordinary ability to memorize quickly, reliably and for long periods of time long opera roles and other musical themes. His brain is compared with those of a few other musicians

who were known for the same ability to remember and to reproduce long musical themes with remarkable accuracy. The common trait of those brains was the abnormally wide first temporal convolution, particularly in the left hemisphere. This development of the brain area (surface) seemed to be the only characteristic feature. Nothing unusual was found in the cellular structure. The author points out that this should not be considered surprising in view of the fact that deaf mutes also do not show any abnormalities in the cytoarchitectonic of their auditory brain centers.—Z. Piotrowski (Columbia).

62. Parker, G. H. *Color changes in animals in relation to nervous activity.* Philadelphia: Univ. Pa. Press, 1936. Pp. ix + 74. \$1.50.—This book consists of the material presented by the author as the Leidy Memorial Lectures at the University of Pennsylvania. Following a brief historical summary, evidence from experiments on the dogfish (*Mustelus canis*) and the killifish (*Fundulus heteroclitus*) for the thesis that chromatophore activity is controlled by a neurohumoral mechanism is described. According to the neurohumoral hypothesis, activity of an autonomic nerve fiber liberates a humor which diffuses from the termination of the fiber to the chromatophore and causes the appropriate behavior of the chromatophore. There are at least two classes of neurohumors: water-soluble (hydrohumor), which spreads rapidly and far, and oil-soluble (lipohumor), which diffuses very slowly and is relatively local in its action. The application of the neurohumoral theory to synaptic transmission is briefly discussed. A very complete bibliography is appended.—M. A. Rubin (Clark).

63. Partington, P. P. *The production of sympathin in response to physiological stimuli in the unanesthetized animal.* *Amer. J. Physiol.*, 1936, 117, 55-58.—The right nictitating membrane in cats was sensitized to sympathin by removal of the right cervical sympathetic ganglion while the left served as a control after section of the left cervical sympathetic chain. Struggle produced in response to a barking dog, hypoglycemia from insulin, and cold (1 hr. at 2° C.) were used to produce sympathetic activation. Retraction of the sensitized membrane to one half that of the control or less was obtained in 30 to 40 seconds, with a return after two or three minutes from excitement and hypoglycemia. Under cold 4-8 retractions per hour were obtained. After thoracic and abdominal sympathectomy three cats showed no response and two which showed a slight one gave evidence of incomplete sympathectomy. It is concluded that the results indicate liberation of sympathin during sympathetic activity under physiological conditions (unanesthetized).—T. W. Forbes (Harvard Bureau of Traffic Research).

64. Pines, L. *Sur les troubles corticaux de la sensibilité chez l'homme.* (On cortical disturbances in sensitivity in man.) *Encéphale*, 1936, 31, 357.—The author seeks to prove the existence of a very fine projection on the cortex of the various parts of the body. 41 titles in the bibliography.—M. H. Piéron (Sorbonne).

65. Powell, E. *Cerebral malnutrition and mental malfunction.* *Med. Rec.*, N. Y., 1936, 144, 318-322.—A study is made of a series of patients with abnormally low and varying blood sugars to determine possible relationships between mental development and functioning and various blood sugar levels. Three cases are reported in detail and observations are drawn from others. The findings made indicate that hyperinsulinism with lowered blood sugar results in cerebral malnutrition leading to failure of development and to cerebral malfunctioning. In variation of blood sugar levels, progressive lowering results in a direct progressive failure of the higher mental functions with a failure of mental integration and the development of abnormal mental states. Medical aspects of these interrelationships are elucidated.—M. H. Erickson (Eloise Hospital).

66. Riese, W. F. J. *Gall et le problème des localisations cérébrales.* (F. J. Gall and the problem of cerebral localization.) *Hyg. ment.*, 1936, 31, 105-136.—F. J. Gall was the first to point out clearly the preponderant role played by the cortex in the psychological life. Riese, however, wishes to point out certain objections to Gall's doctrine, which bear on the limitations of the role of the brain in the evolution of ideas.—M. H. Piéron (Sorbonne).

67. Riese, W. *Les discussions du problème des localisations centrales dans les sociétés savantes du XIX<sup>e</sup> siècle et leurs rapports avec des vues contemporaines.* (Discussions of the problem of central localizations in the learned societies of the 19th century and their relations to contemporary views.) *Hyg. ment.*, 1936, 31, 137-158.—The author shows how since the time of Cuvier, who in his consideration of Gall's localization theories rejected every attempt to localize the indivisible self in a definite point in divisible space, the theory has been modified and discussed by a number of writers. The problem is studied up to and including Gratiolet, who took up the question where Cuvier left off in 1808.—M. H. Piéron (Sorbonne).

68. Smith, K. U. *The effect of extirpation of the striate cortex upon visually controlled palpebral reactions, compensatory eye movements, and placing reactions of the fore limbs in the cat.* *Psychol. Bull.*, 1936, 33, 606-607.—Abstract.—R. H. Brown (Yankton).

69. Tournay, A. *Reflexions sur la physiologie des éléments nerveux dans les centres végétatifs.* (Comments on the physiology of nervous elements in the vegetative centers.) *Rev. Neurol. Psychiat.*, Praha, 1936, 33, 256-260.—Citing some recent experiments on the physiology of respiration (Winterstein, Adrian, Buytendijk), the author illustrates some differences between the vegetative and the cerebrospinal nervous systems. In the cerebrospinal system the elements of the superstructures, interconnected in a succession of circuits, are influenced by reflexogenic stimuli indirectly through other elements placed on the pathways from the receptive fields. In the vegetative system the homologous elements are influenced directly by the variations of the "milieu intérieur"

while remaining accessible to stimulation carried on the usual pathways of conduction of nerve impulses.—Z. Piotrowski (Columbia).

70. Tychowski, W. Z. [Excitability of the cerebellar cortex.] *Acta. Biol. exp., Varsovie*, 1931/1932. 7, 283-289.—(*Biol. Abstr.* X: 15871).

[See also abstracts 12, 184, 188, 213, 386, 502.]

#### RECEPTIVE AND PERCEPTUAL PROCESSES

71. Abel, T. M. Cutaneous localization among normals and subnormals. *Psychol. Bull.*, 1936, 33, 610.—Abstract.—R. H. Brown (Yankton).

72. Beaucoudrey, E. G. de. *Perception et courant de conscience.* (Perception and the course of consciousness.) Paris: Lipschutz, 1936. Pp. 200.—The book is an experimental treatise. In the first part the author studies the influence on the mental work of the subject of suggestions aroused through the perception of an engraving. He defines suggestion as "an operation which produces some kind of a momentary effect on the subject through his intelligence." The mental task imposed is often very slight, such as the search for an antonym or a definition. The Würzburg method was used. In a second series of experiments certain odors were released in the room in which the subject was looking at the picture while seeking the correlative of a given word. The results indicate that when a perception, either visual or olfactory, is imposed on the subject, it is able, through the ideas or mental images which it arouses in the subject, to modify the form of the subsequent thinking by either helping or hindering it; and further, it can force the thinking to take a direction other than would have been taken in its absence.—M. H. Piéron (Sorbonne).

73. Börnstein, W. On the functional relations of the sense organs to one another and to the organism as a whole. *J. gen. Psychol.*, 1936, 15, 117-131.—Stimuli of different modalities may be equated (v. Hornbostel). Börnstein has shown cross-modality summation of darkness or lightness. He has found that bright stimuli lead to increased tonus, retinal adjustments, and hormonal changes in the blood. Thus "brightness-excitation encompasses the whole organism in all its parts, as a fundamental biological process." Other experiments are in progress.—H. Schlosberg (Brown).

74. Bourdon, B. *La perception. Nouveau traité de psychologie. Tome V, fascicule I.* (Perception. New treatise on psychology. Vol. V, No. 1.) Paris: Alcan, 1936. Pp. 84. 15 fr.—Bourdon deals with perception under the following headings: general perception, vision, touch, hearing, visual space, tactile space, auditory space, taste, smell, and cenesthesia. 70 titles in the bibliography.—M. H. Piéron (Sorbonne).

75. Burton, A. C., & Bazett, H. C. A study of the average temperature of the tissues, of the exchanges of heat and vasomotor responses in man by means of a bath calorimeter. *Amer. J. Physiol.*, 1936, 117, 36-54.—An insulated bathtub fitted with a stirring

and electric heating device was used as a calorimeter. Heat production was at a minimum when the average body temperature was at the lowest level compatible with absence of the sensation of cold. Equations are given for the paradoxical change in deep body temperature as a result of changes of the conductivity index accompanying the physiological reaction to changes in temperature.—T. W. Forbes (Harvard Bureau of Traffic Research).

76. Chapman, K. H. Human cyclopia. *Arch. Ophthalmol., Chicago*, 1936, 16, 40-45.—A histological description of the eye of a cyclops with brief mention of other cases in the literature.—M. R. Stoll (Mass. Eye & Ear Infirmary).

77. Chick, L. L. [Effect of light and darkness on the galvanic threshold for excitability of the eye.] *Fiziol. Zh. U.S.S.R.*, 1935, 18, 231-236.—The threshold is raised in darkness and in some cases by an increase in illumination.—H. E. Burtt (Ohio State).

78. Child, I., & Wendt, G. R. The magnitude and temporal course of facilitation of hearing by vision. *Psychol. Bull.*, 1936, 33, 596.—Abstract.—R. H. Brown (Yankton).

79. Chorus, A. *Iets over ruimte-opvatting van blindgeborenen.* (Aspects of the space conceptions of the congenitally blind.) *Ned. Tijdschr. Psychol.*, 1936, 4, 17-49.—The author reports a series of experiments with building blocks in directed and self-determined constructions, and some investigations concerning the conceptions of objects, as pencil, tree, and hole. He is interested in applying the conceptions of Stein on virtual and real movements. Virtual movements are abstractly conceived (incipient?) movements that form the primary basis for spatial pattern conceptions. They are derived from real or actual movements, yet form in turn the basis for the use of actual movements when these are invoked to explain meanings. Chorus suggests that the blind must be assumed to form perceptive response patterns involving the central visual apparatus. The ready acquisition of visual responses by the operatively corrected congenitally blind would otherwise be difficult to explain. Bibliography.—O. N. de Weerd (Beloit).

80. Clark, B. Additional data on binocular imbalance and reading. *J. educ. Psychol.*, 1936, 27, 471-475.—The magnitude and time of the divergence movements which compensate for the over-convergence of the eyes in moving from the end of one line of print to the beginning of the next were determined for 6 subjects who showed a marked normal tendency for the eyes to turn out (exophoria), and the results were compared with those for a control group. The exophoric group made significantly greater divergence movements and required a significantly greater amount of time to complete them. These facts may be of significance for a remedial reading program.—A. W. Melton (Missouri).

81. Costa, A. Sulla sensibilità di differenza nell'eccitamento simultaneo di due organi tattili isolati. (Sensations of difference from simultaneous excitation

of two isolated tactile organs.) *Arch. ital. Psicol.*, 1936, 14, 96-109.—Using Gatti's double hair esthesiometer in a study employing the method of least variations, difference limens were computed for simultaneous pressure on two spots on the volar surface of the forearm. Weber's law was found to apply through a considerable range of stimulus. A bibliography and a photograph of the apparatus are included.—C. J. Herrick (Pennsylvania).

82. Courts, F. A. The alleged retroactive effect of visual stimuli subsequent to a given response. *Psychol. Bull.*, 1936, 33, 619-620.—Abstract.—R. H. Brown (Yankton).

83. Doniselli, C. *Udito e sensi generali*. (Hearing and the general senses.) Milan: Nicola, 1933. Pp. 434. L. 50.—This book is devoted to the study of the arithmetical-musical sense. Following a preface on the anatomy and physiology of the labyrinth, the author considers from the point of physiological psychology the arithmetical-musical sense in its numerical, acoustical, and phonetic elements. A chapter is devoted to the understanding of geometry and of arithmetic with regard to attention and methods of sensitive intuition.—G. M. Hirsch (Rome).

84. Edison, T. M. Perspective and optical illusions of depth. *Calibron Notebook*, 1936, No. 3. Pp. 44.—The first section deals with gauges of depth and several optical illusions. The more technical "Perspective Methods" section comprises treatments of direct projection, vanishing and measuring point projection, conversion factor constructions, etc. The third section is devoted to object-observer-picture plane relationships, perspective rectification, shadows, aerial mapping, etc.—C. H. Graham (Brown).

85. Evans, J. N. Fixation in scotometry. A critical inquiry. *Arch. Ophthalm.*, 1936, 16, 106-118.—Scotomas appear larger when projected on a more distant surface, but frequently definite boundaries cannot be determined at a distance of 2 meters and detail is lost. This is due to relative inaccuracy of fixation at the greater distance. A fixation target must possess a high degree of reflection, maximum contrast, and fine detail if foveal fixation is to be maintained. Removal of a target to a greater distance involves diminution in brightness and decrease in the angle subtended at the eye. Targets should be selected for the distance at which they are to be used so that they are of sufficient brightness to assure greater sensitivity of the central retina as compared with the paracentral retina and so that the detail is just visible to the eye being tested. Steady maintenance of both fixation and accommodation is difficult; a collimating lens can be used to eliminate need for accommodation. Eye movements regularly occurring during fixation have an exaggerated effect at greater distances and so blur the definition of scotoma boundaries. However, although eye movements of 4 minutes occur at intervals of from 1 to 2½ seconds, scotomas smaller than 4 minutes can be mapped, probably because of the averaging of a group of stimuli. Monocular fixation is usually superior to binocular

because no constant angle is maintained between the visual lines of the two eyes. In six cases of central retinitis where vision was approximately equal in the two eyes, the relative position of the lines of fixation remained as in normal eyes, probably because the eyes were so turned that acuity isopters of equal value were used to maintain fixation.—M. R. Stoll (Mass. Eye & Ear Infirmary).

86. Fowler, E. P., Jr., & Forbes, T. W. Depression in order of frequency of the electrical cochlear response of cats. *Amer. J. Physiol.*, 1936, 117, 24-35.—This study investigated the effect on the electrical cochlear response of quinine di-hydrochloride, sodium chloride and calcium chloride crystals and solutions, glycerine and dextrose when applied to the outside of the undamaged round window. A previous preliminary report was made. The above agents (except dextrose and physiological sodium chloride) produced a gross loss of electrical response as recorded from the round window with capacity coupled amplifier and head phones, which loss occurred earlier in high than in low tones, and which increased with time during which agents remained on the window. Sections of the cochleae of cats so treated showed degeneration which was greatest in the basal turn and progressively less toward the apex. In one chronic animal degeneration near the apex occurred only in the outer hair cells and in the external sulcus cells. The characteristic high tone loss and progressively small loss in lower tones is interpreted as evidence for localization along the cochlear spiral of end organs which record tones of medium intensity. The histologic data indicate that the hair cells are indispensable for maximum sensitivity of potential response and therefore support the postulations of numerous investigators.—T. W. Forbes (Harvard Bureau of Traffic Research).

87. Galanine, N. F. [Effect of radiant energy on skin temperature.] *Gig. Bezopas. Trud.*, 1934, 5, 12-15.—Data as to the length of time that radiation is endurable are related to calories per square centimeter of the skin.—H. E. Burt (Ohio State).

88. Gasteiger, H. *Klinische Beobachtungen über die Ausdehnung des pupillomotorisch wirksamen Bezirkes der Netzhaut*. (Clinical observations on the extent of the region of the retina effective in pupil movements.) *Arch. Augenheilk.*, 1934, 108, 553-558.—(*Biol. Abstr.* X: 15835).

89. Gatti, A. *Le rappresentazioni spaziali nel campo tattile puro*. (Spatial representation in the field of pure touch.) *Arch. ital. Psicol.*, 1936, 14, 69-84.—Determinations of difference limens on areal stimulation of the skin and limens of rectilinearity in the alignment of three punctiform stimuli show relationships between the stimuli and perceived spatial relations different from those demanded by Weber's law, which would, however, apply for corresponding visual determinations. Positing the unity of the perceived spatial world, the author presents a relationship of which Weber's law is a special case, according to which the difference limens are proportional to the cube roots of some power of the stimulus,

with exponents varying from 0 to 3. The limits represent the range of liminal values in the fields of touch and vision.—C. J. Herrick (Pennsylvania).

90. Gellhorn, E. The effectiveness of carbon dioxide in combating the changes in visual intensity discrimination produced by oxygen deficiency. *Amer. J. Physiol.*, 1936, 117, 75-78.—3% CO<sub>2</sub> was added to an 8 to 9% oxygen-nitrogen mixture. The visual intensity discrimination reduction produced by O<sub>2</sub> deficiency was partially or completely offset in the carbon dioxide-oxygen-nitrogen mixture. Experiments to be published elsewhere show the same results in "more purely psychic functions." It is suggested that the effect results from improved brain function due to circulation produced by cerebral dilation (Lennox, Gibbs, et al.), shift in the oxygen dissociation curve resulting in more oxygen for the tissues, and improved muscle tonus which increases venous return (Henderson et al.).—T. W. Forbes (Harvard Bureau of Traffic Research).

91. Golmann, S. W. Enrayement et extinction des phénomènes sensitifs. Points sensitifs particuliers de la peau. (Checking and extinction of sensory phenomena. Special sensory points on the skin.) *Encéphale*, 1936, 31, 177-187.—The author thinks that positive sensory phenomena, such as hyperesthesia, hyperpathological cases, and paresthesia, should be considered as dynamic processes, the result of a release of certain fixed modes of sensitivity which are normally in a state of antagonism in relation to certain other modes of sensitivity, the change having been brought about through pathological processes. He shows that the mosaic conception of a static distribution of peripheral sensory elements seems doubtful. The periphery seems to present an unceasingly varying mosaic of zones which are differently excitable at any one moment. Modifications of this mosaic take place under the influence of the following factors: the influence exercised on the given zone by neighboring zones; influences from former experiences upon the zone itself which thus establish new sensory points for any given moment; and influences coming directly from the sensory centers, such as the optic center, the cortex, etc.—M. H. Piéron (Sorbonne).

92. Guilford, J. P., & Lovewell, E. M. The touch spots and the intensity of the stimulus. *J. gen. Psychol.*, 1936, 15, 149-159.—When a small patch of skin was repeatedly explored with stimuli of .01-1.60 gms., it was found that the number of spots found varied with the strength of the stimulus. The resulting function was of the ogive type, and suggested gradients of sensitivity rather than isolated spots. The results are discussed in terms of the probable neural activity involved.—H. Schlosberg (Brown).

93. Gundlach, R. H., & Chard, R. D. The structure and image-forming power of the eye of the pigeon. *Psychol. Bull.*, 1936, 33, 620.—Abstract.—R. H. Brown (Yankton).

94. Heinonen, O. Om undersökning av färgsinnen hos aspiranter på befattningar inom trafikväsendet. (Color blindness testing of candidates for jobs in

the public transportation systems.) *Finska Läk-Sällsk. Handl.*, 1936, 79, 667-684.—In Finland certification for normal color vision of candidates for railway jobs is given by the physicians of the railway systems, and for candidates for the sea transportation systems by any practicing physician. It is, therefore, important that the tests used be simple and reliable. The writer compared the Ishihara, Stilling, and Nagel tests, and offers detailed tabular results. None of the three tests showed 100% reliability. The general conclusions are: (1) Both Ishihara and Stilling are very good and are suited for use by practicing physicians. (2) Ishihara's series is somewhat superior to that of Stilling, but both supplement each other well. (3) Nagel's test is decidedly inferior to those of Ishihara and Stilling. (4) In obligatory examination of color vision of candidates for positions in the railway and marine transportation systems, both Ishihara and Stilling tests should be given. Nagel's test should be dropped or used as supplementary. (5) The Finnish ordinance of 1928 bearing on the testing of color vision for sailors should be annulled. Bibliography.—M. L. Reymer (Mooseheart Laboratory for Child Research).

95. Helson, H. The prediction and control of *Vesirfehler* in the determination of the two-point threshold. *Psychol. Bull.*, 1936, 33, 593-594.—Abstract.—R. H. Brown (Yankton).

96. Hermans, T. G. An experiment on the directional determination of the visual after-image drift. *Psychol. Bull.*, 1936, 33, 621.—Abstract.—R. H. Brown (Yankton).

97. Irwin, F. W., & Seidenfeld, M. A. Asymmetries in judgments on visually perceived figures. *Psychol. Bull.*, 1936, 33, 595-596.—Abstract.—R. H. Brown (Yankton).

98. Jenkins, W. L. Adaptation in isolated cold spots. *Psychol. Bull.*, 1936, 33, 592.—Abstract.—R. H. Brown (Yankton).

99. Johnson, G. L. Subjective visual sensations. *Arch. Ophthalmol.*, Chicago, 1936, 16, 1-4.—Johnson describes visual sensations which have troubled him at frequent intervals and for which he can find no other cause than anemia. Attacks are not accompanied by headache. Peripheral fields remain normal, but the macular field is contracted from the usual 25 mm. by 20 mm. oval to about 5 mm. by 3 mm. Accommodation is weakened and pupils dilate widely. The attack begins with blurring and apparent quivering of objects. This is followed immediately by the appearance of fortification spectra, zigzagged C-shaped figures which are always identical for the two eyes, the gaps always facing either both to the left or both to the right. The figure is made up of two or three brilliant lines, the inner incandescent, the central one yellowish and the outer showing a tinge of red. The figure vibrates in a centrifugal motion; vibrations are at the rate of between 8 and 12 per second. After about 20 minutes, the figures spread out and become increasingly fainter until they vanish and normal vision returns. Johnson is inclined to attribute the sensations to some disturbance at the

chiasma because of the identical character of the images for the two eyes.—*M. R. Stoll* (Mass. Eye & Ear Infirmary).

100. Kappauf, W. E. Flicker discrimination in the cat. *Psychol. Bull.*, 1936, 33, 597-598.—Abstract.—*R. H. Brown* (Yankton).

101. Karwoski, T. Psychophysics and mescal intoxication. *J. gen. Psychol.*, 1936, 15, 212-220.—An attempt was made to study the effects of mescal on thresholds for light and color. Although both subjects reported the visual phenomena usually associated with the drug, no clear-cut changes in thresholds could be demonstrated. The difficulties inherent in such an experiment are described, and several suggestions are made for future experimentation. Many of the effects of the drug are described in detail.—*H. Schlosberg* (Brown).

102. Kennedy, J. L. Thresholds of "relative" visual movement discrimination in cats. *Psychol. Bull.*, 1936, 33, 598-599.—Abstract.—*R. H. Brown* (Yankton).

103. Kenway, G. The determination of olfactory thresholds. *Psychol. Bull.*, 1936, 33, 621.—Abstract.—*R. H. Brown* (Yankton).

104. Krauss, S. Die zwei Wurzeln des Zeitbewusstseins. (The two bases of the consciousness of time.) *Ned. Tijdschr. Psychol.*, 1936, 4, 96-110.—Mental diseases, e.g., Korsakow's, which show a deterioration of temporal orientation, always show other forms of mental disturbance as well. The time sense is thus suggested as being essentially a complex mental process. Accepting the mental interpretation as the essential factor in humans, Krauss accepts as the other basis a "primitive sense of duration," shared by animals, and probably a mid-brain function. The mental integration is an actual inner activity, which like all other higher mental functions is directed and teleological in nature. The human time sense thus involves attention, purpose, etc. When the capacity for these higher processes is disturbed temporal disorientation follows.—*O. N. de Weerd* (Beloit).

105. Kubo, Y. [Experimental studies of so-called form constancy.] *Jap. J. Psychol.*, 1936, 11, 265-278.—The standard object, a white round cardboard 20 cm. in diameter inclined upward at 30°, and fourteen variable ellipses with horizontal axes 20 cm. and vertical ones 20-17 cm., were presented in front of and parallel to the observer at 1.5 m. These conditions were changed in various ways as to inclination of the stimuli and the background. The author divided the problem into two parts, form constancy under comparison and under single presentation. In this paper form constancy was dealt with as a case of general comparison. English summary.—*R. Kuroda* (Keijo).

106. Lazarev, P. P., Podzorov, N. A., Iakovlev, I. I., & Kuzminykh, L. V. [Adaptation in peripheral vision at various stages of pregnancy.] *C. R. Acad. Sci. URSS*, 1934, 1, 182-186.—(*Biol. Abstr.* X: 15841).

107. Locke, N. M. Size constancy in the rhesus monkey and in man. *Psychol. Bull.*, 1936, 33, 599.—Abstract.—*R. H. Brown* (Yankton).

108. McGregor, D. Sensitivity of the eye to the saturation of colors. *J. exp. Psychol.*, 1936, 19, 525-546.—This experiment was undertaken because it seemed that clues to many of the problems in color vision might lie in a thorough understanding of the nature of saturation and its relation to brightness and hue. The threshold for saturation was measured at 6 different wave lengths. The measurements were made at levels of brightness varying between .01 and 500 mls. "The data indicate that variations from the mode of sensitivity to saturation are the rule rather than the exception. Previous investigators, while often mentioning the possibility of a distribution of sensitivity among a population, have failed usually to recognize that an adequate theory of color vision must provide some means for the inclusion of such variation. It is evident that relative sensitivity to different hues varies from eye to eye. One individual may be supersensitive to green, and less than normally sensitive to yellow . . . These facts do not allow for a qualitative distinction between color blindness and normal vision. In terms of sensitivity, the classification of different 'forms' of color blindness is not likely to be very valuable." The importance of the data for the theory of color vision is discussed.—*H. W. Karn* (Pittsburgh).

109. Miki, Y. [Some experimental researches of the space structure as a condition for the so-called form constancy.] *Jap. J. Psychol.*, 1936, 11, 242-264.—In a dark room only two disks, the one a standard stimulus 50 mm. in diameter and 1.5 m. from S and the other a comparison stimulus, are visible with spotlights. In this manner, with the distance of objects somewhat indistinguishable, the results of comparison indicate more constancy of form than is the case in a bright room. When the field of comparison is disturbed by means of contour effect, difference of brightness, or color illumination, the same tendency is observed. The author explains these data from a psychophysical standpoint. English summary.—*R. Kuroda* (Keijo).

110. Monjé, M. Über die Wirkung von Wechselströmen verschiedener Frequenz auf die Hautsensibilität. (Concerning the effect of alternating currents of various frequencies on skin sensibility.) *Z. Sinnesphysiol.*, 1936, 67, 2-18.—The object of this experiment was to determine the relationship between the prickling sensations and the stimulating frequencies of alternating currents. With a specially built generator pure sinusoidal waves of a frequency of from 20 to 4000 were obtained. Two independently variable frequencies could be presented in rapid succession. Stimulation lasted two seconds, followed by a one second rest, and was then repeated. The stimulating current was transmitted by two silver electrodes immersed in 10% NaCl solution, into which S put his first and fourth fingers. Records were taken with a loop oscillograph. It was found that: (1) The differential limen up to 200 cycles was 1 to 2%, i.e.

alternating currents varying from each other by 1-2% in frequency elicited specific, clearly distinguishable pricking. (2) The pricking sensation follows the stimulating frequency up to 200 cycles. Increased pricking was not obtained with an increase of frequency up to 4000 cycles. (3) Pricking frequency is dependent within limits upon the stimulating intensity. With low frequencies this limit is near threshold; it increases with frequency.—G. F. J. Lehner (Brown).

111. Nissen, H. W. Reduction and rivalry of differential cues in visual discrimination habits of chimpanzees. *Psychol. Bull.*, 1936, 33, 599-600.—Abstract.—R. H. Brown (Yankton).

112. Oberto, S. La soglia di rettilineità nel campo tattile puro. (The limen of rectilinearity in the field of pure touch.) *Arch. ital. Psicol.*, 1936, 14, 85-95.—Gatti's visual experiments are repeated in the field of pure touch by determination of limens of rectilinearity, or of errors in the alignment of three equidistant punctiform stimulations of the volar region of the forearm. Taken in relation to the separation of the points, the data show that while in vision the angular error tends to remain constant, in touch the angular error decreases with the increase of the stimulus, and the linear error expressed in millimeters approaches a constant value. The different behaviors of the limen values in touch and vision are discussed in the light of the special characteristics of spatial representation in the field of pure touch.—C. J. Herrick (Pennsylvania).

113. Ogiwara, S. [An experimental study of the perception of one's own movement.] *Jap. J. Psychol.*, 1936, 11, 279-306.—(1) The subjects, with closed eyes in an elevator which moves with various speeds (6-40 m. per sec.) up and down, are asked about the direction of their movement. Misjudgments are found more often when speed changes from fast to slow than otherwise. The feeling of movement direction in this condition generally becomes uncertain when 7-8 sec. have elapsed. (2) The subjects in a moving cage observe the wall of the shaft through a trapezoidal prism; consequently various optical directions contrary or oblique to actual movement are perceived. When the speed is fast enough the apparent movement is felt as if the cage moved in a direction between the optical and muscular sensations. The author experimented in detail further in the situations in which (1) and (2) are combined. English summary.—R. Kuroda (Keijo).

114. Pearce, C. H. Modification of median plane localization by response. *Psychol. Bull.*, 1936, 33, 616—Abstract.—R. H. Brown (Yankton).

115. Piéron, H. Revue générale d'acoustique psychophysique. (General review of psychophysiological acoustics.) *Année psychol.*, 1934, 35, 167-197.—The review presents a discussion of the recent studies on the complex problems of audition under the following headings: (1) the measurement of sounds and the units of measurement; (2) mathematical treatment; (3) the influence of intensity on tonal pitch; (4) the origin of subjective sounds; (5) the electrical auditory response (Wever and Bray

phenomenon); and (6) the localization of cochlear receptors.—R. Goldman (Boston Psychopathic Hospital).

116. Preston, M. G. Intra-serial effects and psychophysical judgments. *Psychol. Bull.*, 1936, 33, 595.—Abstract.—R. H. Brown (Yankton).

117. Raffel, G. Recovery of sensitivity to prick and touch after pressure block, with a note on the sensitivity of hair spots. *J. gen. Psychol.*, 1936, 15, 13-21.—The recovery of sensitivity to prick and touch from a pressure block were charted. That for touch yields a smooth, negatively accelerated curve, reaching normal in 25 minutes. The curve for prick is complex, suggesting the masking of pain by temperature and touch. It was also found that hair spots do not lose their sensitivity even when the hair is pulled out.—H. Schlosberg (Brown).

118. Ross, R. T. The fusion frequency in different areas of the visual field. I. The foveal fusion frequency. *J. gen. Psychol.*, 1936, 15, 133-147.—The foveal fusion frequencies of 21 normal subjects were determined, using a test patch 40' in diameter. The patch was 2.44 ml in brightness, and was viewed against dark surrounds after the subjects had had 2 minutes of adaptation at 3.42 ml. The data are presented in detail and the apparatus described. Absolute values from individual subjects should not be compared, but "Results obtained from a sufficient number of readings on a single subject at a single session are probably amenable to theoretical treatment, provided that the general physiological and psychological state of the subject does not materially change or indicate pathology." Bibliography of 62 titles.—H. Schlosberg (Brown).

119. Ross, R. T. The fusion frequency in different areas of the visual field. II. The regional gradient of fusion frequencies. *J. gen. Psychol.*, 1936, 15, 161-170.—A continuation of the work reported in the preceding paper. Fusion frequencies were determined for test patches at various positions on the four major co-ordinates of the retina. Fusion frequency decreases with increase of peripheral angle. Normal subjects have similar gradients on all co-ordinates, if correction is made for individual variations in physiological state. "We have good reason to believe that visual process is fundamentally the same in different individuals and that the apparent differences are due to physiological factors which influence visual sensitivity."—H. Schlosberg (Brown).

120. Ross, R. T. A comparison of the regional gradients of fusion frequency and visual acuity. *Psychol. Monogr.*, 1936, 47, 306-310.—The problem of this study was "to establish the fusion frequency and visual acuity gradients of the same subjects under experimental conditions as similar as possible in order to discover what degree of similarity may exist between fusion frequency and visual acuity in different regions of the visual field." 11 persons with normal vision served as subjects. The results showed an essential similarity in the gradients of visual acuity and fusion frequency. "This similarity, as well as the characteristics of the individual gradients, is attri-

buted principally to a common element in the two situations, namely, decrease in effective cone density. It is inferred, therefore, that receptor organ density is a determining factor in fusion frequency."—K. F. Muenzinger (Colorado).

121. Rothschild, S. *Über Farbenkreisel mit Luminophoren.* (Concerning color wheels with luminophores.) *Z. Sinnesphysiol.*, 1936, 67, 1.—The mixing of complementary colors with a color wheel never results in a pure white. However, if instead of ordinary color pigments luminophores are used, a pure white is obtained. ZnS luminophores, exposed to ultra-violet radiation, are particularly suitable. The advantage of using luminophores to supplement investigations with the usual pigments is pointed out.—G. F. J. Lehner (Brown).

122. Sato, K. [The framework and the Poggen-dorff illusion.] *Jap. J. exp. Psychol.*, 1936, 3, 135-145.—In order to discover whether the periodicity of the Poggen-dorff illusion is influenced by the direction of the framework on the basis of the illusion line, two forms of experiments were made: experiments with an inclined frame and experiments with the inclined head. It was concluded that the framework has some effect on the amount of illusion; at its 15° inclination the amount of illusion is smaller in the direction of the frame than in the direction of the retinal horizon, that is to say, the direction of 15° inclination of the frame receives a "functional" horizon, but at the inclination above 30° the frame gives way to the retinal direction. English summary.—R. Kuroda (Keijo).

123. Schaffrath, H. *Über die elektrisch erzeugte Prickelempfindung in der Mundhöhle.* (Concerning electrically elicited pricking sensations in the mouth.) *Z. Sinnesphysiol.*, 1936, 67, 39-52.—The technique for this problem was essentially the same as that used by Monjé, with modifications of the electrodes. A small active electrode was placed in the mouth, with the large indifferent electrode usually about 5 cm. below the elbow. Various types of active electrodes were tried. Results show that the entire mucous membrane is divided into various areas from each of which is obtainable a characteristic pricking, dependent to a certain extent upon frequency, intensity, and size and manner of attachment of electrodes. The differential frequency limen for the mouth (up to 200 cycles) is about the same as for the fingers (3%).—G. F. J. Lehner (Brown).

124. Sciuti, M. *Un caso di anosmia traumatica.* (A case of traumatic anosmia.) *Osped. Psychiat.*, 1935, 3, 3.—The author reports a case of complete anosmia due to indirect traumatism, slowly cured after two years. He discusses its pathogenesis and the medico-legal criteria, and from this point of view suggests that this type of case be included in the insurance lists.—G. M. Hirsch (Rome).

125. Serrat, W. D., & Karwoski, T. *An investigation of the effect of auditory stimulation on visual sensitivity.* *J. exp. Psychol.*, 1936, 19, 604-611.—"The effect on visual sensitivity of simultaneous stimulation with a tone was measured. No reliable

differences were obtained for either the general or the specific color threshold. These results are discussed with reference to the reported observations that visual acuity is increased in the presence of a simultaneously acting auxiliary stimulus. Since the threshold for light is a direct measure of the sensitivity of the retina, the negative results obtained between sound and sight indicate either (1) that the alleged cortical diffusion is obtainable under particular conditions, not covered by these experiments, or (2) that the mechanism of diffusion is of such a nature that sensitivity for light is not primarily affected."—H. W. Karn (Pittsburgh).

126. Sheard, C. *The effects of intensity of illumination on presbyopia, accommodation and convergence.* *Amer. J. Optom.*, 1936, 13, 241-254.—General discussion and survey of recent work in this field. "The ease of seeing, when vision is normal and the powers of accommodation and convergence are adequate, is controlled almost entirely by sufficient and proper lighting."—R. J. Beitel, Jr. (American Optical Company).

127. Sheard, C. *Glarometric measurements on ocular photosensitivity.* *Amer. J. Optom.*, 1936, 13, 281-289.—Tolerance to light in a group of individuals who did not complain of sensitiveness to and discomfort produced by light was investigated by glarometric methods. Using an illumination of 6.4 foot-candles as measured at the target, it was found that 85% of the subjects reported glare-out or invisibility of letters on the target with environmental illuminations ranging from 100 to 400 foot-candles when the left eye was tested, 94% experienced glare with the right under background illuminations of 100 to 500 f.c., whereas under binocular test more than 80% reported glare-out under illuminations of 100 to 600 f.c. The placement of absorptive neutral tint filters before the eyes did not alter the values of the glare-out illumination in f.c. Tests with colored filters indicate that there is little, if any, difference in the glare values which is dependent on the spectral character of the illumination employed in the glare field. The effects of changes of illumination, in f.c., on the target carrying the fixated letters on the values of the glare-out illuminations were investigated. The results show that the ratio between the glare-out values and the illumination on the target was constant.—R. J. Beitel, Jr. (American Optical Company).

128. Shibata, T. [The influence of contour figure upon the negative after-image.] *Jap. J. Psychol.*, 1936, 11, 223-241.—A negative after-image of a circle or a square is projected on a contour figure which is presented on the same wall after the stimulus is removed. Then it is observed that the vanishing process of the after-image changes its course according to the shape of the contour figure. In general the after-images fade into a form which is similar to the contour figure. The author explains these facts as phenomena effected by the contour figure process in the brain. English summary.—R. Kuroda (Keijo).

129. Smith, W. The correction of amblyopia ex anopsia. *Amer. J. Optom.*, 1936, 13, 296-301.—R. J. Beitel, Jr. (American Optical Company).
130. Stanton, F. N. Factors in visual depth perception. (Film.) Columbus: Ohio State Univ., 1936. 1 reel, 382 ft., 16 mm. \$18.00 sale.—The factors of intervention, accommodation, parallax, chiaroscuro, position in the visual field, relative size, linear and angular perspective, foreshortening and relative distinctness are illustrated. There is some use made of animation in illustrating the mechanisms of accommodation and convergence. Disparate images are purposely left to other means of demonstration.—W. L. Valentine (Ohio State).
131. Stone, L. J. Form perception in the thermal sense modalities. *Psychol. Bull.*, 1936, 33, 592-593.—Abstract.—R. H. Brown (Yankton).
132. Takahashi, H. [An experimental study of the influence of illumination intensity upon a fine work.] *Jap. J. Psychol.*, 1936, 11, 406-412.—Subjects were requested to cancel three types of figures under various indirect illuminations. Illumination intensity lower than 10 lux greatly decreased efficiency of work. English summary.—R. Kuroda (Keijo).
133. Teplov, B. M. The dependence of the absolute visual threshold on the presence of an additional stimulus in the field of vision. *J. gen. Psychol.*, 1936, 15, 3-11.—Foveal thresholds were measured on three dark-adapted subjects, using an artificial pupil. The threshold was lowered by an additional luminous patch 65' from the fixation point when the extra patch was dim, but raised when the brightness of the extra patch was more than 13 times its threshold value.—H. Schlossberg (Brown).
134. Volkman, J. Judgment and discriminatory analysis. *Psychol. Bull.*, 1936, 33, 594.—Abstract.—R. H. Brown (Yankton).
135. Warkentin, J. The development of visual acuity in kittens. *Psychol. Bull.*, 1936, 33, 597.—Abstract.—R. H. Brown (Yankton).
136. Werner, C. F. Über die statische Funktion der Macula utriculi und ihres Otolithen. (The static function of the macula utriculi and its otoliths.) *Acta oto-laryng.*, Stockh., 1936, 24, 253-270.—For ten years the idea prevailed that the macula utriculi and macula sacculi had the same function, viz., the release of the labyrinthine position reflex. The maculae utriculi alone are sufficient to account for all static reflexes. Whether the elasticity of the otolith membrane is a cause of the static excitation has not been determined. The hypotheses of stimulation of the sense epithelium through mechanical, electrical, or osmotic means were found to be inconsistent with the experimental and anatomical facts. The maculae are stimulated through changes of hydrostatic pressure in the macularium through the otolith pressure by sharing the endolymph pressure.—M. B. Mitchell (New York City).
137. Wetmore, R. G. The effect of practice on visual acuity. *Psychol. Bull.*, 1936, 33, 615-616.—Abstract.—R. H. Brown (Yankton).
138. Wever, E. G., & Bray, C. W. A comparative study of hearing in vertebrates. *Psychol. Bull.*, 1936, 33, 607.—Abstract.—R. H. Brown (Yankton).
139. Wollmann, B. Gleichzeitige sensible Reizung der menschlichen Haut durch zwei Wechselströme verschiedener Frequenz. (Simultaneous sensory stimulation of the human skin with two alternating currents of different frequency.) *Z. Sinnesphysiol.*, 1936, 67, 19-38.—Two stimulating frequencies which could be independently varied were rhythmically presented by means of a generator and the regular commercial 50-cycle current. The intensity of the two frequencies, which usually had a ratio of 1:1, as well as the resultant of the two (the intensity of the resultant with reference to the intensity of the components was as  $\sqrt{2}:1$ ), was measured by a milliammeter. A loop oscillograph was used for recording. Stimulation was effected by means of two silver electrodes, one attached to the first finger, the other to the fourth, while the fingers were immersed in a 10% NaCl solution. Results indicate that: (1) when two different frequencies are given simultaneously the prickling sensation is a resultant of the two frequencies. (2) Prickling sensations can be differentiated on the basis of phase differences between the stimulating frequencies. (3) When two closely similar frequencies are presented prickling sensations occur on the beats. (4) Differentiation between two frequencies is easily possible in the frequency range of speech, suggesting the application of prickling sensations for the instruction of deaf mutes.—G. F. J. Lehner (Brown).
- [See also abstracts 3, 33, 147, 150, 158, 178, 186, 187, 274, 310, 340, 367, 371, 374, 380, 390, 423, 430, 445.]

# LEARNING, CONDITIONING, INTELLIGENCE (incl. Attention, Thought)

140. Altavilla, E. Il riconoscimento. (Recognition.) Rome: Foro Italiano, 1935. Pp. 222.—Altavilla discusses the problems of testimony, especially the recognition of persons and things, recognition from photographs, etc.—M. E. Morse (Baltimore).
141. Batalla, M. B. The learning curve and the reliability of learning scores in a body maze. *Univ. Calif. Pub. Psychol.*, 1936, 6, 153-162.—Human subjects, 58 boys and 50 girls ranging in age from 10 to 13 years, were tested in a body maze under conditions which largely overcame difficulties resulting from artificial testing conditions, restrained activity, lack of motivation, etc. Drawing, time, error, and trial scores show boys superior to girls, and the learning curves are typical. The study showed the body maze to be as reliable as the stylus and finger mazes usually found in psychological laboratories.—F. A. Mole, Jr. (Brown).
142. Bayles, E. E. An unemphasized factor in current theories regarding the transfer of training. *J. educ. Psychol.*, 1936, 27, 425-430.—"It seems probable that we transfer previous learning whenever and wherever we sense a later experience as being

similar, more or less completely, to an earlier one. This 'sensing of similarities or relationships' may be vague, or it may reach the level of fully conscious understanding. The more clearly or fully the relationships are sensed or recognized the greater is the likelihood of transfer." The discussion is limited to positive transfer and to human learning.—A. W. Melton (Missouri).

143. Brown, R. W. The relation between age (chronological and mental) and rate of piano learning. *J. appl. Psychol.*, 1936, 20, 511-516.—There is a suggestion of a critical age around seven for learning the first 10 piano lessons. Rank order correlations, for a group of 18 children, for rate of learning with CA and MA are .60 and .23 respectively.—R. S. Schultz (Psychological Corporation).

144. Campbell, A. A., & Hilgard, E. R. Individual differences in ease of conditioning. *J. exp. Psychol.*, 1936, 19, 561-571.—The authors found that measurements of conditioned eyelid responses are sufficiently reliable to justify comparisons of susceptibility to conditioning with other measures of individual differences. Frequency and amplitude are more reliable than latency. The number of trials required to reach a criterion has been shown to be a corollary of the frequency measure in which a fixed number of reinforced trials are given and the subject's relative susceptibility to the procedure is determined by the number of conditioned responses he has given during the training period. Wide individual differences are present among human subjects in the ease with which they form conditioned responses. None of the 63 subjects used in this study failed to give at least one conditioned response during the training series of 100 reinforced trials. The criterion of five conditioned responses was reached in a mean of 25 trials. Distributions showing individual differences in ease of conditioning of the eyelid reflex are without the bimodality which Pavlov's theory might predict. Intelligence, finger reaction time, and responses to prestige suggestion are not significantly related to ease of conditioning.—H. W. Karn (Pittsburgh).

145. Campbell, R. K. Some difficulties in conditioning galvanic skin responses. *Psychol. Bull.*, 1936, 33, 618-619.—Abstract.—R. H. Brown (Yankton).

146. Carter, L. F. Maze learning with a differential proprioceptive cue. *Psychol. Bull.*, 1936, 33, 619.—Abstract.—R. H. Brown (Yankton).

147. Cason, H. Sensory conditioning. *J. exp. Psychol.*, 1936, 19, 572-591.—This study was concerned with the possibility of modifying the influence of stimuli on other simultaneous sensory processes by training of the CR type. The following conditions were used with different groups of subjects in the CR training procedure: (1) S merely paid attention to light and sound as they were presented together; (2) in addition to paying attention, S repeated the words "light" and "sound" while the stimuli were present; (3) in addition to paying attention, S gripped a hand dynamometer; and (4) in addition to paying attention S received a shock while the stimuli were present. Before the CR training procedure, a stimulus

affecting one of the two senses had the effect of increasing the intensity of the other simultaneous sensory response; but after the CR training, a stimulus affecting one of the two senses decreased the intensity of the other simultaneous response. The inhibiting influence of one sensory process on the other simultaneous sensory response was greatest after S had performed an overt motor act in the CR training procedure. Only a slight modification could be produced in the sensory-verbal-judgment process. It is concluded that learning cannot be thought of as being dependent upon organic processes located exclusively in the central nervous system.—H. W. Karn (Pittsburgh).

148. Delacroix, H. Les opérations intellectuelles. *Nouveau traité de psychologie. Tome V, fascicule 2.* (Intellectual operations. New treatise on psychology. Vol. V, Part 2.) Paris: Alcan, 1936. Pp. 184. 20 fr.—There are two parts in this treatise. The first deals with the intellectual operations proper: thinking, images, concepts, the evolution of general ideas, judgment and its formulation, the defining of what is meant by comprehension, and the concept of number. The second treats language: the processes of gaining information, nature and convention, what is meant by language, phonetic laws, forms of language as expressions of thinking and formulations of judgments, changes in significance and special languages, development of language in the individual, reading and writing, deaf mutes, and the psychological function of language. Bibliographies are given at the ends of the sections.—M. H. Piéron (Sorbonne).

149. Delacroix, H. La croyance. *La psychologie de la raison. Nouveau traité de psychologie. Tome V, fascicule 3.* (Belief. The psychology of reason. New treatise on psychology. Vol. V, No. 3.) Paris: Alcan, 1936. Pp. 118. 20 fr.—Delacroix deals with belief in the first part of his book: immediate belief, degrees in belief, the necessity of arbitration and arbitrariness in belief and certitude, and faith. In the second part he deals with the problems of the psychology of reason and the nature and function of intelligence as follows: intelligence, its organization and structure; experience and intelligence; manipulation, construction, and intelligence; intelligence and adaptation; unity of intelligence; reason, identity, and diversity; global intelligence and general intelligence; animal intelligence, its higher forms, and human intelligence; the question of prelogical mentality; the technique of magic; and knowing. Numerous footnotes.—M. H. Piéron (Sorbonne).

150. Elliott, F. R. Memory for visual, auditory and visual-auditory material. *Arch. Psychol.*, N. Y., 1936, No. 199. Pp. 58.—The present study seeks to determine the memory effectiveness of advertising trade names presented (1) to the eye by means of a projector and screen, (2) to the ear by means of a public address system which produced the effect of radio, and (3) to the eye and ear simultaneously by screen and radio combined under conditions similar to television. 36 fictitious advertisements were presented in triple rotation order to equalize practice

effects and association value of materials. Memory is better for broken presentation than for unbroken presentation. After the original presentation has been completed and when the real and fictitious trade names are again presented in the recognition test, it is shown that when the items are presented aurally in the second series, memory scores are higher than when the items are presented visually. Non-descriptive material lends itself poorly to radio, particularly among the less schooled. The advantage of the auditory over the visual mode is statistically reliable for women, but much less reliable for men. The author suggests a theory of visual-auditory shift.—*E. M. Achilles* (Columbia).

151. Fitts, P. M., Jr. Some relationships between the hunger drive and experimental extinction. *Psychol. Bull.*, 1936, 33, 600-601.—Abstract.—*R. H. Brown* (Yankton).

152. Gibson, J. J., & Raffel, G. A technique for investigating retroactive and other inhibitory effects in immediate memory. *J. gen. Psychol.*, 1936, 15, 107-116.—"The retention of geometrical nonsense forms, presented in a series, is an inverse function of their serial position when five forms are given, but does not vary with position when three forms are given." "Instead of the laws of primacy and recency, future investigations should bear on the complex of possible inhibitory influences which may be at work among the items of a series of impressions and on their position character and membership in a temporal group." The method is described in detail.—*H. Schlosberg* (Brown).

153. Groos, K. Vererbte Gewohnheit? (Inherited habits?) *Ned. Tijdschr. Psychol.*, 1936, 4, 85-95.—A defense of the notion of instincts as inherited ancestral habits, based on typical anecdotes of the behavior of dogs, squirrels, etc., with the traditional assumption of insight and purpose. Arguments by implication are presented as equally valid with demonstrable reality.—*O. N. de Weerd* (Beloit).

154. Guthrie, E. R. Thorndike's concept of "belonging." *Psychol. Bull.*, 1936, 33, 621.—Abstract.—*R. H. Brown* (Yankton).

155. Hilgard, E. R., & Marquis, D. G. Conditioned eyelid responses in monkeys, with a comparison of dog, monkey, and man. *Psychol. Monogr.*, 1936, 47, 186-198.—In four out of five rhesus monkeys eyelid responses to air puffs were conditioned to flashes of light which preceded the unconditioned stimuli by 400 ms. The latency of the conditioned responses decreased as their frequency increased; the mean latency was 226 ms., "definitely anticipatory with respect to the air-puff." "Three periods of attempted extinction, following 5 or 6 periods of reinforcement, failed to produce diminution of response frequency. . . . A protracted extinction series with one animal produced some decrease in frequency of response within 12 periods of non-reinforcement." These results are compared with similar experiments on dogs and human subjects previously published.—*K. F. Muenzinger* (Colorado).

156. Hill, M. Training to reason. *Aust. Coun. educ. Res. Ser.*, 1936, No. 44. Pp. 71.—An investigation into the possibility of training in seeing relations of evidence and educating correlates dealing with these relations. Four tests involving different kinds of evidential material were especially constructed and given to five groups of children. Four of the groups were then trained each in one of the types of material, the fifth group being used as a control. After training, the groups were again tested, both for improvement within a type of material and across types. The author finds that there is specific gain in all sets of material, but that "this gain is not transferable except in cases where method of attack facilitates the handling of the new type of material." She explains the cases of negative transfer which occurred in a similar way. The tests used and the training lessons are given as appendices.—*D. Shallow* (Worcester State Hospital).

157. Holcomb, L. A preliminary report on distance-and-direction as a factor in error distribution in the multiple-T maze. *Psychol. Bull.*, 1936, 33, 621.—Abstract.—*R. H. Brown* (Yankton).

158. Honzik, C. H. The role of kinesthesia in maze learning. *Science*, 1936, 84, 373.—Reference is made to the work of earlier investigators, Watson, Lashley and Ball, and Ingebritsen, and the conclusion is reached that kinesthesia has been found unnecessary not only to the perfected habit but also to the learning of the habit. The author worked with a group of 45 blind, deaf, anosmic, but not tactually anesthetic rats, and concludes from the negative results of his tests that "not only is kinesthesia unnecessary both to learning and to the perfected habit, but that learning on the basis of kinesthesia alone is impossible." This conclusion is modified by the statement that kinesthesia "seems to be essential to the acquisition of skill . . . but this function it can assume only in conjunction with other classes of stimuli and only after learning has begun on the basis of other stimuli."—*F. A. Mote, Jr.* (Brown).

159. Hovland, C. I. "Reminiscence" following learning by massed and by distributed practice. *Psychol. Bull.*, 1936, 33, 614-615.—Abstract.—*R. H. Brown* (Yankton).

160. Kitamura, S. [Position of self in the ideation.] *Jap. J. Psychol.*, 1936, 11, 381-405.—Method: subjects with closed eyes give reports of their associations aroused by words which are given verbally. Position of self here was classified into four kinds. German summary.—*R. Kuroda* (Keijo).

161. Malgaud, W. De l'action à la pensée. (From activity to thought.) Paris: Alcan, 1935. Pp. 330. 30 fr.—In the three parts of this study the author seeks to prove that the order of consciousness is from activity to thought. The first part deals with the primary aspects of cognition, psychology before the appearance of cognition, first appearance of cognition and of rational cognition, and the image and representation. The second part is devoted to psychological analysis, sensation and feeling, cognition as a function of activity, and representation of

objects. The third deals with metaphysics and reviews the subject of activity, initial judgment, quality, time, space, and the stimulus object.—*M. H. Piéron* (Sorbonne).

162. McGeech, J. A. Retroactive inhibition as a function of the relative amounts of original and interpolated materials. *Psychol. Bull.*, 1936, 33, 613-614.—Abstract.—*R. H. Brown* (Yankton).

163. Mitrano, A. J. Incentive value of a symbolic reward with mentally deficient children. *Psychol. Bull.*, 1936, 33, 610-611.—Abstract.—*R. H. Brown* (Yankton).

164. Razran, G. H. S. Discussion: the conditioning of voluntary reactions. *J. exp. Psychol.*, 1936, 19, 654-654.—In recently published experimental findings and discussions C. N. Rexroad, J. J. Gibson, and J. M. Stephens have made statements to the effect that prior to the time of their reports there existed no experimental evidence on the conditioning of voluntary reactions. The author calls attention to the fact that at the time these statements were made the literature contained numerous references on the successful conditioning of voluntary reactions. Among others, the author cites the experiments on the conditioning of voluntary reactions which have been conducted in the Russian laboratories for the last 20 years.—*H. W. Karn* (Pittsburgh).

165. Rexroad, C. N. Types and methods of learning. *J. gen. Psychol.*, 1936, 15, 196-205.—Seven types of learning are differentiated. Four result directly from conditioning, and the remaining three from conditioning in the course of trial and error. Similarities and differences between the types are discussed in terms of primary and secondary requirements for learning.—*H. Schlosberg* (Brown).

166. Rock, R. T., Jr. Knowledge of results of responses compared with after-effects following each response in a learning situation. *Psychol. Bull.*, 1936, 33, 613.—Abstract.—*R. H. Brown* (Yankton).

167. Sarbin, T. R., Green, E. J., & Meckler, H. H. Pecking in chicks under different conditions of feeding and light. (Film.) Columbus: Ohio State Univ., 1936. 1 reel, 300 ft., 16 mm. \$16.50 sale.—A repetition of the Shepard and Breed experiment with the opportunity to peck normally delayed beyond the 14 days of Padilla's experiment. There were four groups of chicks: kept in light, pecked normally; kept in light, hand fed; kept in dark, pecked normally during feeding periods in light; kept in dark, hand fed. Method of feeding in dark is shown. Besides pecking, drinking, preening, and perching are shown in comparison between groups. Pictures were taken on the 9th, 16th, 21st and 30th days. The film is designed for animal psychology classes; it is too technical for beginners.—*W. L. Valentine* (Ohio State).

168. Sears, W. N. Discriminatory conditioning of eyelid reactions. *Psychol. Bull.*, 1936, 33, 623.—Abstract.—*R. H. Brown* (Yankton).

169. Seegers, J. C., & Postpichal, O. Relation between intelligence and certain aspects of physical ability. *J. educ. Res.*, 1936, 30, 104-109.—A study of

656 boys in two special schools in Philadelphia. Five athletic test scores were correlated with the results of a mental test. A positive but low correlation was found to exist between the IQ and the scores on the athletic tests.—*S. W. Fernberger* (Pennsylvania).

170. Sells, S. B. The atmosphere effect: an experimental study of reasoning. *Arch. Psychol.*, N. Y., 1936, No. 200. Pp. 72.—The problem of this investigation was to check the validity of the atmosphere hypothesis and to analyze the conditions of the atmosphere effect in reasoning with formal syllogistic problems. The atmosphere effect was defined as a "temporary set of the individual, arising within a situation (problem) to complete a task with that one of several alternative responses (judgment or inference) which is most similar to the general trend or tone of the whole situation (problem)." The results of the experiments reported, while offering unequivocal objective evidence for the atmosphere effect in formal syllogistic reasoning, fail to reveal subjective evidence for it as a reportable datum of experience. In the protocols of the observers of these experiments frequent use of schemas in the solution of problems were noted. The schema frequently leads to an incorrect conclusion. The need is recognized of further research on the relation of schemas (total patterns). The tendency to react to the problem as a whole, and to build up a total pattern or schema, further suggests a relationship with the Gestalt theory of reasoning as stated by Wertheimer.—*E. M. Achilles* (Columbia).

171. Stroud, J. B. The reliability of nonsense syllable scores derived by group method of experimentation. *J. exp. Psychol.*, 1936, 19, 621-629.—Two lists of 15 syllables each were selected from Glaze's list of 20% associative value and two each from the list of 80% associative value. Relative reliability of the syllables of the two degrees of associative value was determined by a comparison of the correlation coefficients for the two paired lists. A technique was used whereby each subject could determine accurately and quickly the correctness of each response as it was made. The correlation coefficients obtained indicate that there is no difference between the reliability of nonsense syllables of 80% associative value and of those of 20% associative value. The suggestion is offered that the lists of 20% value might prove to be the more reliable under experimental conditions in which the subjects were given as many trials as required for mastery of all of the lists. Further, the group procedure employed is as reliable and otherwise as satisfactory as the customary individual procedure of presentation.—*H. W. Karn* (Pittsburgh).

172. Syz, H. Posttraumatic loss of reproductive memory and its restoration through hypnosis and analysis. *Med. Rec.*, N. Y., 1936, 144, 313-317.—A case report is given with detailed discussion of an unusual memory disorder accompanied by various neurological disturbances which resulted from a head trauma and which was characterized by an anterograde amnesia extending over a period of three years.

Under hypnotic exploratory measures and therapeutic suggestions the patient regained simple isolated memories for this period and was enabled to re-establish slowly his retentive functions in relation to his immediate environment. As his recovery progressed his neurological symptoms disappeared in large part, and during the last few years the patient has been economically self-sufficient and apparently normal except for slight neurological residuals.—*M. H. Erickson* (Eloise Hospital).

173. Tilton, J. W. The effect of forgetting upon individual differences. *Psychol. Monogr.*, 1936, 47, 173-185.—In order to find out "what happens to the individual differences in the period following the practice or training period" the author searched that part of the literature on forgetting which permitted a comparison of standard deviations and coefficients of variability before and after forgetting. Altogether 39 sources were used. The detailed results, which are presented in a table, indicate that there is a tendency for the standard deviations to increase, and that "the more the S. D. is reduced during learning the more it is increased during forgetting."—*K. F. Muenzinger* (Colorado).

174. Tolman, E. C., Prowse, C. P., & Kuznets, G. The effects of reward, punishment, and exercise on "connections." *Psychol. Bull.*, 1936, 33, 624.—Abstract.—*R. H. Brown* (Yankton).

175. Watanabe, T., & Nomura, Y. [Effects of the thyroid gland upon the behaviour and learning ability of rats.] *Jap. J. Psychol.*, 1936, 11, 329-362.—Albino rats were given desiccated thyroid gland every day, 0.005 gr. per 100 gr. of their body weight, and mice were given 0.0006 gr. Ten days later experiments were conducted on rats by the obstruction method, by maze learning, and by the choice box method, and on mice by the revolving wheel method. The results are as follows: the behavior of hyperthyroid rats is more active and excitable than that of ordinary ones. The former learn to cross the water sooner than the latter, and also learn more rapidly in maze learning or the choice box. The hyperthyroid mice show better records in wheel revolving at the first trial, but they make no progress; the ordinary ones surpass them after a week's learning. English summary.—*R. Kuroda* (Keijo).

176. Wile, I. S. The role of the forgettery in education. *Amer. J. Orthopsychiat.*, 1936, 6, 376-396.—In a theoretical discussion of the role of forgetting in education, the writer considers the "forgettery" as much more than the absence of memory. It is considered to be an active force, operating as does memory in terms of impression, retention, and recall. Thorndike's concept of memory bonds and the concept of the neurological engram are criticized. Remembering and forgetting are described as related to external and internal stimuli, to the emotions, to such entities as the self-regarding sentiment of MacDougall, to the personal needs of an individual, and to the pedagogical stress upon "don't" and "mustn't." A final plea is made for the consideration of the forgettery as a

positive and essential force in the educational growth of the individual.—*J. McV. Hunt* (Brown).

177. Zeise, L. Wesen und Übung des bildhaften Erkennens (Imagination). (The nature and practice of imagination.) *Beih. Z. angew. Psychol.*, 1936, No. 72, 89-102.—Briefly describing the role of imagination in early thought and through history, the author points out the great cultural significance of having imagination again come into its own. This is largely due to three factors: (1) philosophy, particularly as developed by Klages, (2) medicine and psychotherapy, with its complexes, phobias, etc., and (3) parapsychology, which borders on the magic and certain phenomena of which are closely related to imagination. The importance of imagination in various fields is pointed out, and the validity and extent of the data obtained in this manner are discussed.—*G. F. J. Lehner* (Brown).

[See also abstracts 12, 27, 137, 183, 309, 392, 400, 497, 526.]

## MOTOR AND GLANDULAR RESPONSES

(incl. Emotion, Sleep)

178. Alajouanine, T., & Thurel, R. Les réactions motrices hyperalgésiques. (Hyperalgesic motor reactions.) *Encéphale*, 1936, 31, 169-176.—The hyperalgesic motor reactions cannot be considered as reflexes, as they are diffuse and require the integrity of the motor pathways for their production. Their essential characteristic is pain caused by peripheral stimulation.—*M. H. Piéron* (Sorbonne).

179. Barcroft, J., & Barron, D. H. The genesis of respiratory movements in the foetus of the sheep. *J. Physiol.*, 1936, 88, 56-61.—Rhythmic trunk movements associated with respiration appear in sheep between the 38th and 49th days of foetal life. They are due to a general mass movement of an extensor type as a result of the dropping out of head and limb movements. At about the 49th day their frequency becomes more rapid and the movements more powerful as the result of muscular effort. After the 50th day, the rhythmic movements disappear as a spontaneous phenomenon but can be elicited by stopping the blood flow in the umbilical cord.—*M. A. Rubin* (Clark).

180. Bena, E., & Uttl, K. Frekvencni reakce srdce pri reflexu okulokardialnim. (Frequency reactions of the heart in the oculocardiac reflex.) *Rev. Neurol. Psychiat., Praha*, 1936, 33, 504-538.—The subjects were 151 men, 23 to 33 years old, applicants for service in the police department who had finished their military service. The chief purpose was to obtain data which would permit a differentiation between a normal and an abnormal slowing of the rhythm of the heart following compression of the eyes. Each subject was tested thoroughly under various conditions; the tests were repeated on the first or the second day after the initial examination. Individual variation and particularly the correlation between the pulse rate before and after compression of the eyes was studied. The progress of the slowing-down process

of the heart rhythm in the oculocardiac reflex and the correlations between the components of this reflex were the other two chief problems. Conclusions pertaining to the diagnostic significance of the findings are offered. The views of many investigators are reinterpreted on the basis of the authors' extensive statistical findings. There is a 5-page English summary.—Z. Piotrowski (Columbia).

181. Campbell, M. An experimental evaluation of the significance of three factors involved in motor performances for general motor ability. *J. exp. Psychol.*, 1936, 19, 612-620.—In earlier reports the author has described four motor tasks and has shown them to be highly correlated. In this study these tasks have been varied and repeated in such a way as to indicate the extent to which each of three factors entering into the performance contribute to the high degree of correlation. These factors are: (1) the limb employed to do the task, whether arm or leg; (2) the rightness or leftness of the limb used; (3) the visibility or invisibility of the reaction keys. Six tasks in all were performed by each of 54 subjects; the tasks were found to be highly stable and equally difficult. Generality of ability, as indicated by correlation between performances, is greater on the average if in both of the performances correlated an arm or a leg is used, and less if in one of the performances correlated an arm is used and in the other a leg. Generality of ability is about the same if in both of the performances correlated a right or a left limb is used, or if in one performance a right limb is used and in the other a left. Generality of ability is the same if in both performances correlated the reaction keys are visible or invisible or if in one performance the keys are visible and in the other invisible. Generality of ability is still present to a fairly high degree when all three of the factors investigated vary simultaneously between correlated performances.—H. W. Karn (Pittsburgh).

182. Campione, F. L'istinto materno. (The maternal instinct.) Milan: Bompiani, 1935. Pp. 288. L. 12.—Maternal instinct is studied and described in its most varied and strange manifestations through the whole zoological scale from polyps to monkeys and from spiders to women. On this last point the author dwells further, having been able, as a physician, to observe all the heroism and the gentleness that this instinct suggests. Toward the end of the book the author assumes a polemic tone to oppose the fashion of not desiring children.—G. M. Hirsch (Rome).

183. Davis, R. C. The effects of analgesic dosage of aspirin (acetyl salicylic acid) on some mental and motor performances. *J. appl. Psychol.*, 1936, 20, 481-487.—A medium dosage of aspirin produces practically no effect on such functions as steadiness, reaction time, addition, opposites, code translation, and pulse rate.—R. S. Schultz (Psychological Corporation).

184. Dosuzkov, T. Reflexy pricne-pruhovaneho svalstva a choroby mozeckove. (Reflexes of the striated muscles and diseases of the cerebellum.)

*Rev. Neurol. Psychiat., Praha*, 1936, 33, 547-559.—In diseases of the cerebellum only the postural reflexes regularly show a change. Areflexia of posture is the typical sign of these diseases. Other reflexes of the striated muscles also may demonstrate some change, but one can find cases in which the absence of postural reflexes is the only reflex sign of cerebellar lesions. The conclusions are based on a brief historical survey of the problem and on the author's observations of 12 cases. Short anamneses and results of examinations of all reflexes studied are given.—Z. Piotrowski (Columbia).

185. Essen, J. v. Het reageeren op een lichtsignaal van verre en nabij. (The reactions to a light signal at a distance and nearby.) *Ned. Tijdschr. Psychol.*, 1936, 4, 7-16.—In a covered passageway between two university buildings three signal lamps were installed at distances of 2, 12 and 24 meters from the position of the subject, who responded with a telegraph key when a light was flashed. Differences in brightness and their effect on reaction time were discounted. 14 subjects, with 100 reactions each at each distance, were used. In general the longer distances showed slower reaction times. Individual differences are neither consistent nor reliable. In the discussion it is suggested that as the speed of an auto increases, the driver's attention must be given to distant points, and that consequently the reaction time to near stimuli would be lengthened by the influence of the dominance of the primary attentive response.—O. N. de Weerd (Beloit).

186. Fay, P. J. The effect of cigarette smoking on simple and choice reaction time to colored lights. *J. exp. Psychol.*, 1936, 19, 592-603.—In this study no attempt was made to eliminate or control such factors as suggestion, anticipation or other factors that are not eliminated or controlled in everyday smoking. Results are summarized by the author as follows: "(1) Individuals differ so much in their simple reaction time to red light and in their choice reaction time to blue light that no statistically reliable normal can be taken as a basis of comparison with smoking sessions. (2) Individuals, both non-smokers and regular smokers, differ markedly in the apparent effect which the smoking of one cigarette has on their reaction times, either simple or choice, to colored light. (3) Individuals differ markedly in the length of time after smoking one cigarette at which the greatest apparent effect of the smoking occurs. (4) Smoking apparently does not significantly affect the number of errors made in choice reaction to red and blue lights. (5) Non-smokers tend to react more slowly to red light for about 5 minutes after smoking one cigarette; regular smokers are little affected. (6) Regular smokers tend to react more rapidly to a choice between red and blue lights for at least one hour after smoking one cigarette; non-smokers are little affected."—H. W. Karn (Pittsburgh).

187. Fessard, A., & Kucharski, P. Recherches sur les temps de réaction aux sons de hauteurs et d'intensités différentes. I. (Investigations on the

reaction times to sounds of different pitches and different intensities. 1.) *Année psychol.*, 1934, 35, 103-117.—The reaction time method is used for the study of sensory excitation. The work of Piéron is outlined and his general formula  $t = a/(a - b) + k$  is discussed. The study of reaction time to auditory stimulation has been undertaken because of the improvement of apparatus and techniques in the electro-acoustical fields, and the finding that there is a variation in the excitation constants which is a function of the vibration frequency. The influence of the intensity of the sound on the reaction time, using a greater range of intensities than had been made before, and the influence of the pitch of the tone as a factor in determining latency of reaction to different levels of intensity, were studied. At the higher intensities there is no systematic influence of pitch on the duration of the briefest latency. The data fall into two curves, one for frequencies up to 1024 and the other for those above this. The results are discussed, but before any interpretation of them is made, more intensive and extensive experiments are necessary.—*R. Goldman* (Boston Psychopathic Hospital).

188. Fox, C. F., Jr., & Couch, F. H. Spontaneous nystagmus—a study in neural rivalry and competition. *Psychol. Monogr.*, 1936, 47, 250-267.—Optic or normal nystagmus was superimposed upon spontaneous or pathological nystagmus. The apparatus used was the Dodge mirror-recorder. The subjects were two patients, the first of whom showed pathological vestibular nystagmus following transection of the eighth cranial nerve. In this case visual fixation under all optical conditions (still fixation, pursuit of a pendulum and of moving designs) had a strong suppressing effect upon vestibular nystagmus. The second patient had congenital nystagmus. This case "revealed a remarkable capacity for the eye to both pursue and fixate the visual object in spite of continuous oscillation about the point of regard. . . . In such a conflict as this, between a fundamental systematization and an acquired system, the fundamental system is the more insistent in the rivalry for the final common pathway."—*K. F. Muenzinger* (Colorado).

189. Galamini, A. Azione della stimolazione del senso cinestesico speciale sui movimenti volontari. (The effect of stimulation of the special kinesthetic sense on voluntary movements.) *Valsalva*, 1936, 12, 332-348.—The author has studied the variations of a voluntarily determined movement of the arm which are due to the excitation of the labyrinth by rotation; he used the revolving bed of Baglioni, to which he applied a jointed lever with two Marey tambours. Transmission to these tambours was effected by a special tambour which permitted recording on a kymograph the movements during rotation. The author included in his experiments some subjects who had taken alcohol, and in these subjects the alterations in voluntary movement lasted much longer.—*G. M. Hirsch* (Rome).

190. Gates, A. I., & Bond, G. L. Relation of handedness, eye-sighting and acuity dominance to

reading. *J. educ. Psychol.*, 1936, 27, 450-456.—Tests of handedness, eye dominance, and visual acuity were given to children in four groups: (1) 65 retarded readers with a mean age of 8.61 years; (2) a control group of 65 normal readers equivalent in other respects to the first group; (3) a group of 55 first-grade pupils studied repeatedly during the year; and (4) a group of 57 first-grade pupils studied during the first half of the year. "The data obtained from the first grade pupils, older normal readers, and older reading problem cases show no consistent tendency for eye dominance, single-eye superiority in acuity, hand dominance, or any combination of these to be related to achievement in reading, word pronunciation, reversal errors, or visual perception of various items."—*A. W. Melton* (Missouri).

191. Glanville, A. D., & Kreezer, G. Quantitative studies of human gait and its development. *Psychol. Bull.*, 1936, 33, 609-610.—Abstract.—*R. H. Brown* (Yankton).

192. Heydt, A. v. d. Alkohol. (Alcohol.) *Fortschr. Neurol. Psychiat.*, 1936, 8, 399-420.—This article continues the one published in the same journal in 1934, and covers the investigations from the middle of 1934 to the beginning of 1936. The articles are classified as follows: general; those dealing with physiological and psychological experiments on alcohol; clinical studies; alcohol and its relationship to circulation, blood, and fluids; pathological anatomy, clinical and institutional treatment; inheritance; forensic and statistical studies. There is a bibliography.—*D. S. Oberlin* (Delaware State Hospital).

193. Hunt, W. A. Unscrambling emotion. *Psychol. Bull.*, 1936, 33, 609.—Abstract.—*R. H. Brown* (Yankton).

194. Husband, R. W. Sleep, work, and food habits in the tropics. *J. gen. Psychol.*, 1936, 15, 210-212.—A brief description and discussion of changes in daily activities that are brought about by the heat of the tropics.—*H. Schlosberg* (Brown).

195. Kaplun, S. J. [Problems of physiology of work at the Fifth Congress of Physiology of the U.S.S.R.] *Gig. Bezopas. Trud.*, 1934, 5, 76-83.—Topics discussed at the Congress include the nature of fatigue, biochemical studies, physiological changes such as blood pressure, and chronaxy. The work schedule was considered with special reference to pauses.—*H. E. Burt* (Ohio State).

196. Kirson, M. B. [Effect of work on the hardness of the muscle.] *Fiziol. Zh. U.S.S.R.*, 1935, 18, 605-620.—The hardness of the muscle is relatively stable during rest. Work on the ergograph produces a quick and short hardening of the muscle followed by prolonged decrease. Stimulation of the relaxed muscle produces some increase in hardness, with individual differences.—*H. E. Burt* (Ohio State).

197. Klages, L. Grundlegung der Wissenschaft vom Ausdruck. (The basis of a science of expression.) (Rev. ed.) Leipzig: Barth, 1935. Pp. 361. RM. 9.60.—The author discusses expression in the animal world, particularly of man, and in the vegeta-

tive world. Attention is also given to the theory of perception, of speech, writing and art.—G. F. J. Lehner (Brown).

198. Klimke, W. *Über lokalisierte Muskelkrampfzustände und ihre Entstehung.* (Localized states of muscular cramp and their genesis.) *Z. ges. Neurol. Psychiat.*, 1936, 155, 592-607.—Several case studies lead to the conclusion that cramps and cramp neuroses are due to stimulation of the sympathetic nervous system. This stimulation may be traced to fatigue substances in the muscles, or the cramps may represent a general neuro-vegetative hypersensitivity. Cramps may also appear in cases of central disorders in the region of the thalamus.—C. W. Fox (Rochester).

199. Kunze, G. *Rhythmische Erscheinungen bei biologischen Vorgängen.* (Rhythmical phenomena in biological processes.) *Arbeitsphysiologie*, 1935, 9, 36-42.—Glycogen and  $P_iO_4$  in the muscle of rabbits shows periodicity which correlates with meteorological factors. In some animals pronounced deviations were shown on days of storm.—H. E. Burrll (Ohio State).

200. Mall, G. D. *Konstitution und Affekt.* (Constitution and affect.) Leipzig: Barth, 1936. Pp. 104. RM. 6.60.—Affective responses, measured by means of the psychogalvanic skin reflex, the pupillary reflex, pulse rate, and the psychomotor tempo, are discussed in relation to constitutional types.—G. F. J. Lehner (Brown).

201. Marshall, W. *The mechanisms of psychoallergy.* *Amer. J. Psychiat.*, 1936, 93, 75-86.—An attempt to discover the common mechanism of the emotions and the psyche is made by presenting a theory of psychoallergy. The allergic mechanism, in which the individual's sensitivity to specific aspects of his environment determines his reaction, is affected by an increased emotional force. "A large portion of this emotional force is derived from symbols of action patterns which have conditioned the body." The stimulus-response concept is not in itself adequate; the reaction of an organism to a pertinent stimulus depends upon its saturation point, which in turn determines the afferent threshold value. Stimulus words of a word-association test are psychoallergens to which an individual's responses are determined by his sensitivity to them.—R. Goldman (Boston Psychopathic Hospital).

202. McNeill, H. *The evolution in the form of certain motor reactions.* *Psychol. Bull.*, 1936, 33, 617.—Abstract.—R. H. Brown (Yankton).

203. Miles, W. R. *The reaction time of the eye.* *Psychol. Monogr.*, 1936, 47, 268-293.—The "foveal drive" is described as the organism's "visual exploration of its environment hour after hour, reacting to multitudes of successive and repetitive stimuli by means of visual reactions, eye movements and fixations"; unlike the thirst and hunger drives, it "shows no obvious phenomenon of satiation independent of general fatigue." The historical development of the problem of the latency of this drive, that is, of the reaction time of the eye, is traced. A series of ex-

periments is presented with such variable factors as size, distance from fovea, and direction of the stimulus of fixation; monocular and binocular stimulation are compared; the effect of practice upon latency is studied. In formulating his experiments the author has felt that he "was laboring on a problem rooted in the fundamental work of Professor Dodge."—K. F. Muenzinger (Colorado).

204. Mowrer, O. H. *A comparison of the reaction mechanisms mediating optokinetic nystagmus in human beings and in pigeons.* *Psychol. Monogr.*, 1936, 47, 294-305.—The author observed that if vision is permitted in only the right eye a pigeon shows nystagmus when the environment is rotated from right to left, but practically none when the environment is rotated from left to right. If vision is permitted in only the left eye, the phenomenon is reversed. This phenomenon is not observed in normal human subjects in whom vision is permitted in only one eye; it is observed, however, in persons with homonymous hemianopia. The difference between pigeons and human subjects is ascribed to the fact that in the pigeon there is complete decussation of the visual fibers at the optic chiasm, while in human beings the decussation is incomplete. "The optokinetic nystagmus which is elicited by horizontal movement of the visual field is mediated by retinomotor tracts which pass through that half of the brain which lies on the side toward which the movement occurs. . . . The traditional notion that visual pursuit movements of the eyes are mediated in man by the contralateral cerebral hemisphere is based upon a misinterpretation of the facts and should be abandoned."—K. F. Muenzinger (Colorado).

205. Nice, L. B., & Fishman, D. *The specific gravity of the blood of pigeons in the quiet state and during emotional excitement.* *Amer. J. Physiol.*, 1936, 117, 111-112.—An average increase of 0.0025 in specific gravity was found in a total of 28 pigeons. Excitement was produced by restraining the bird and teasing with weak faradic shock for approximately 3 minutes. The increase was much less than that previously found in cats and rabbits.—T. W. Forbes (Harvard Bureau of Traffic Research).

206. Oliver, R. T. *Human motivation: intellectuality, emotionality, and rationalization.* *Quart. J. Speech*, 1936, 22, 67-77.—A discussion of intellectuality, emotionality, and rationalization as types of motivation, with special reference to public speaking.—B. Wellman (Iowa).

207. Ozeretzki, —. *L'échelle métrique du développement de la motricité chez l'enfant et chez l'adolescent.* (A metric scale for determining the development of motor ability in the child and the adolescent.) *Hyg. ment.*, 1936, 31, No. 3.—This scale, which has been translated and adapted by J. Abramson and H. Kopp, has been used since 1934 in the neuropsychiatric child clinic of the Faculté de Paris, under the direction of Heuyer. In addition to giving the total development of the motor level, it provides a profile showing the general dynamic coordination, rapidity of movement and rapidity of

simultaneous movements, and presence or absence of synkinesis. The test can be applied to children from 4 to 16 years of age.—*M. H. Piéron* (Sorbonne).

208. **Passanisi, I.** *L'influenza del fattore emotivo sul tasso azotemico.* (The influence of the emotional factor on the nitrogen blood content.) *Clin. Mal. ment. nerv. R. Univ. Bologna*, 1936, 1-7.—The author has constantly observed an increase in the nitrogen blood content in easily suggestible subjects after arousing them with psychic traumata. He suggests the existence of a relation between the psychic centers and the regions responsible for maintaining the normal nitrogen blood content.—*G. M. Hirsch* (Rome).

209. **Patrizi, M. L.** *Il mio metodo per lo studio della fatica muscolare nell'uomo mediante la doppia curva elettrica. Prova aggiuntiva della sua sensibilità.* (My method for studying muscular fatigue in man, with the aid of simultaneous electrical recording; the adjunct test of sensitivity.) *Arch. Sci. biol., Napoli*, 1935, 21, 504-509.—After describing his method, which permits of simultaneous recording of ergometric and chronometric curves, as well as latent time or latent excitation, the author gives the results he has obtained by the use of this technique in studying the pharmacological action of a preparation (the "Ristor" of Erba) intended as a restorer of muscle tone after fatigue. The action which follows is indicated by a diminution of latent time and an increase in total mechanical work and in muscle tone.—*G. M. Hirsch* (Rome).

210. **Rowland, L. W.** *The somatic effects of stimuli graded in respect to their exciting character.* *J. exp. Psychol.*, 1936, 19, 547-560.—Evidence is presented which shows that heart rate, the galvanic skin reflex and six measures of respiration are increased by exciting ideational stimuli during hypnosis. The application of even the least exciting stimulus gives effects which are clearly distinguishable from that of a period of non-stimulation. The increase in effect is roughly proportional to the strength of the exciting stimulus. Results obtained from repeating the stimuli from day to day are included in the report.—*H. W. Karn* (Pittsburgh).

211. **Runkel, J. E.** *Luria's motor method and word association in the study of deception.* *J. gen. Psychol.*, 1936, 15, 23-37.—In the main experiment each of 8 subjects was put through an exciting experience and then tested promptly. Verbal and manual reactions were recorded for 25 non-crucial and 10 crucial words. Significant verbal reactions were obtained in response to 32.5% of the crucial words, while 50% of the motor responses were preceded by a preliminary tremor which marked them as significant. The results are in agreement with those of Luria.—*H. Schlosberg* (Brown).

212. **Schochrin, W. A.** *Über Atmungsfrequenz und -reaktion bei Frauen und Männern.* (Rate of breathing and its changes in men and women.) *Arbeitsphysiologie*, 1935, 9, 70-75.—No sex differences were found in breathing rate. There is a decrease in the rate with age, except in glass blowers.

Women show greater increase in respiration after work than do men.—*H. E. Burt* (Ohio State).

213. **Schwind, J. V.** *Successful transplantation of a leg in albino rats with reestablishment of muscular control.* *Science*, 1936, 84, 355.—The right hind leg, including all the bones and muscles below the knee joint, was transplanted from one rat to the back of another. Careful operative techniques were employed to maintain the necessary blood and nerve supplies, and after several weeks the new leg was able to respond to irritation and sustain a weight. It is now several months since one of the operations was performed, and the transplanted leg shows no signs of impaired muscular activity.—*F. A. Mote, Jr.* (Brown).

214. **Scofield, C. F.** *The effects of mild doses of alcohol and caffeine on optic nystagmus.* *Psychol. Monogr.*, 1936, 47, 217-241.—"By means of the Dodge mirror-recorder technique photographic records were obtained of optic nystagmus in response to 3 velocities of a series of moving stimuli under conditions of mild doses of alcohol and caffeine. . . . There is a tendency for alcohol to disturb the ocular adjustment, a tendency manifested by an increasing inadequacy of the pursuit phase of the nystagmus as the amount of alcohol ingested increased. Preliminary data suggested some slight increase in the adequacy of ocular response under the influence of caffeine, but further investigation failed to confirm this indication. This may be due to the relative mildness of the caffeine dosages as compared with those of alcohol. The investigation suggests that optic nystagmus may be used as an index of the effects of alcohol and caffeine upon motor performance, but that unequivocal conclusions wait upon more adequate methods of quantifying the eye movement records than have heretofore been applied in such studies."—*K. F. Muensinger* (Colorado).

215. **Shock, N. W., & Coombs, C.** *The validity and reliability of certain indices of change in skin resistance as measures of affectivity.* *Psychol. Bull.*, 1936, 33, 623.—Abstract.—*R. H. Brown* (Yankton).

216. **Skinner, B. F.** *Thirst as an arbitrary drive.* *J. gen. Psychol.*, 1936, 15, 205-210.—After a repetition of eight of his earlier experiments, but with thirst substituted for the hunger drive, Skinner concludes: "A rough survey, therefore, indicates that thirst closely resembles hunger as a factor in the control of behavior, but that for minor practical reasons it is not to be preferred as an arbitrary drive."—*H. Schlosberg* (Brown).

217. **Studnitz, G. v.** *Studien zur vergleichenden Physiologie der Iris. VI. Elektrische Reizung der Irismuskulatur.* (Studies on the comparative physiology of the iris. VI. Electrical stimulation of the iris musculature.) *Zoöl. Jb.*, 1935, 54, 313-326.—(*Biol. Abstr.* X: 15847).

218. **Torboli, A.** *Sull' essenza della cosiddetta "reazione di Donaggio" nell' orina di individui affaticati.* (On the so-called Donaggio reaction in the urine of fatigued individuals.) *Boll. Soc. ital.*

*Biol. sper.*, 1935, 10, 548-550.—The author has attempted to make studies on the mechanism of the Donaggio reaction in the urine of certain fatigued individuals, and he discusses the value attributed to this reaction as a test for fatigue.—G. M. Hirsch (Rome).

219. Travis, R. C. The latency and velocity of the eye in saccadic movements. *Psychol. Monogr.*, 1936, 47, 242-249.—The experiment was designed to determine by means of the Dodge mirror-recorder the latency and the speed of the quick phase of saccadic eye movements, and the time necessary for the eye to "catch up" with the moving object after it had appeared in the visual field. The stimulus for eliciting the quick phase was a number moving at a constant speed of 12° per sec. in a visual field restricted to 10°. The speed of the eye during the quick phase was determined by having the subject "fixate and re-fixate" respectively small crosses appropriately mounted 5°, 10°, and 15° apart in the visual field." The mean latency was found to be 197 ms. The average velocities for the 5°, 10°, and 15° excursions were 178°, 285°, and 394° per sec. respectively. The mean time to catch up with the moving object was 30 ms. These values are based on 10 responses each from 113 male college students.—K. F. Muenzinger (Colorado).

220. Valentine, W. L., Troyer, M. E., & Brown, M. A. Eye movements in reading. (Film.) Columbus: Ohio State Univ., 1936. 1 reel, 284 feet, 16 mm. \$17.00 sale.—The operation of the ophthalmograph in diagnosing reading difficulty due to faulty eye movement is explained. The fixational pause, forward sweep, and regression are shown graphically and also by means of actual eye photographs. An exceptional second-grade and an ordinary third-grade reader are compared. A slow third-grade reader serves to demonstrate unusually long fixational pauses. Regressions are illustrated by eye photographs of a college freshman who also uses his finger to follow the line and moves his lips. The expert eye movements of a good college freshman follow. The operation of the metronoscope, used in correcting eye movements in adults and training the proper ones in a preschool child, is shown. The excessive head and body movements of the beginner are shown to be eliminated as mastery of the skill is approached.—W. L. Valentine (Ohio State).

221. Weingrow, S. M. The external oblique abdominal tendon reflex. *Med. Rec.*, N. Y., 1936, 144, 317-318.—The author presents a discussion of a tendon reflex reaction which consists of an outward and upward movement of the abdominal musculature and the umbilicus, elicited by tapping the anterior and outer parts of the lower chest wall. This reflex reaction may be related to the Monrad-Krohn "periosteal reflex of the costal margin." It is not appreciably affected in pyramidal tract disease, but differences in reaction are noted in encephalomyelitis and central nervous system lues. It is affected in disease of the lower six thoracic metameres of the spinal cord and may serve in the localization of

lesions. It is diminished or absent in abdominal rigidity of peritoneal irritation.—M. H. Erickson (Eloise Hospital).

222. Wendt, G. R. The form of the vestibular eye-movement response in man. *Psychol. Monogr.*, 1936, 47, 311-328.—"It is the purpose of this paper to present a detailed analysis of the character of the compensatory deviation of the eyes during short arcs of rotation (15° to 65°) and to relate the form of the slow phase of the eye movement to the form of the rotation." By means of a rotating platform three types of movements were produced, a 65° rotation, a single 40° oscillation, and a 15° harmonic oscillation. The eye movements were recorded by the Dodge mirror recorder. The results showed a "striking correspondence between the form of the rotation and the form of the eye movement." The bearing of the results on the physiology of the vestibulo-ocular reflexes is discussed.—K. F. Muenzinger (Colorado).

223. Westburgh, E. M. Affective factors from the point of view of clinical psychology. *Psychol. Monogr.*, 1936, 47, 351-374.—Physicians "know little and care less about painstaking measurement of abilities and the following of scientific procedure in their investigations. On the other hand, as severe a criticism can be directed against the academic psychologists. They have done well in devising methods of measuring some abilities, but have paid little attention to the emotional life of their subjects." The author discusses the role of feelings and emotions in personality adjustment, following in a general way McDougall's classification of instincts and emotions and Drever's suggestions regarding this classification. 50 references.—K. F. Muenzinger (Colorado).

[See also abstracts 48, 65, 68, 88, 90, 136, 145, 151, 153, 169, 214, 257, 299, 315, 346, 384, 412, 439, 443, 449, 503, 504, 510, 529.]

## PSYCHOANALYSIS, DREAMS, HYPNOSIS

224. Anderson, J. Psycho-analysis and romanticism. *Aust. J. Psychol. Phil.*, 1936, 14, 210-215.—Fantasy is characterized by its "backward-looking character," the end sought being a restoration of some former condition. This feature seems to be true also of all romanticism, as is shown by its symbolical nature. Rank's concept of the birth trauma is of application here. Such a concept shows the end sought by romanticism to be a return to the prenatal state. These considerations suggest "along what lines certain positions in philosophy, aesthetics and psychology can be linked."—H. D. Spoerl (American International College).

225. Cannon, A. The science of hypnotism. New York: Dutton, 1936. Pp. 126. \$1.50.—The book constitutes a presentation of the author's view that "hypnotism is the master key to the mind and living kind."—M. H. Erickson (Eloise Hospital).

226. Deutsch, F. Euthanasia: a clinical study. *Psychoanal. Quart.*, 1936, 3, 347-368.—The author presents a clinical discussion of the dynamics involved in various deathbed scenes, with particular emphasis

placed upon illustrative scenes of peaceful dying. He concludes that "euthanasia occurs when all aggressive reactions subside, when the fear of death has been dispelled, and when there is no further question of a sense of guilt. . . . It would seem that it is the fact that the path of regression of the libido to the objects of infantile love—in early childhood apparently associated with intense sense of guilt—can be retrodden without any feeling of guilt. . . . Before freedom from a sense of guilt can be achieved, however, guilt must be atoned for by the knowledge of imminent death with all of its psychical consequences."—*M. H. Erickson* (Eloise Hospital).

227. **Feigenbaum, D. On projection.** *Psychoanal. Quart.*, 1936, 3, 303-319.—The author summarizes his article as follows: "(a) projection belongs to the peripheral-active group of defense mechanisms, in contradistinction to the central-passive one, and it is the most aggressive in its group; (b) the target of this aggressive defense mechanism may be either an object-cathexis (exosomatic projection) or a bodily organ (endosomatic projection); (c) projection is a preferred method of defense in conditions characterized by a struggle for genitality, such as in convalescence from neurosis, in early phases of psychosis, and in delinquency, in which it facilitates the establishment of introjects of the second order, as well as a super-ego of the second order; and (d) all forms of projection are reducible to a fundamental defense mechanism appearing in various clinical pictures corresponding to a gamut of specific stages of development, ranging from the 'normal' in dreams, beliefs, superstition, prejudice and creative work, to the pathological in hysteria, hypochondria, phobia, depression and paranoia."—*M. H. Erickson* (Eloise Hospital).

228. **Freud, S. The problem of anxiety.** (Trans. by H. A. Bunker.) New York: Norton, 1936. Pp. 165. \$2.00.—A translation of *Hemmung, Symptom und Angst* which has been running serially in the *Psychoanalytic Quarterly*.—*R. R. Willoughby* (Brown).

229. **Freud, S. Inhibitions, symptoms, and anxiety.** (Trans. by H. A. Bunker.) *Psychoanal. Quart.*, 1936, 5, 415-443.—Chapters 9, 10 and 11 of *Hemmung, Symptom und Angst*, published in German in 1925. Discussion is given of the relationships between symptom formations and anxiety development and of the significance of anxiety as a reaction to danger. The final chapter is one of addenda giving modifications of views previously held and a supplementary discussion of anxiety.—*M. H. Erickson* (Eloise Hospital).

230. **Frois-Wittmann, J. Psychologie objective et psychanalyse.** (Objective psychology and psychoanalysis.) *Evolut. psychiat.*, 1935, No. 3, 45-81.—*M. H. Piéron* (Sorbonne).

231. **Hendrick, I. Ego development and certain character problems.** *Psychoanal. Quart.*, 1936, 3, 320-346.—The author offers a theory of ego development and ego defect which involves the following propositions: (1) Ego development is a process which culminates in the capacity of the personality to

maintain its existence, and to secure adequate gratification of libidinal and aggressive impulses in a socialized environment of adults. (2) The basic structure of the adult ego is achieved in the pre-oedipal phases of development through identification processes based upon partial object cathexes. (3) Each successive group of pre-oedipal identifications provides a solution of immediate anxieties and contributes specific functions to the organization of the developing ego. (4) A failure to solve an infantile anxiety situation by an identification will be represented by a defective ego function which necessitates inhibition or projections deleterious to mature object relationships at each subsequent level of development. (5) Repression is a defense against libidinal impulses and aggressions which are highly sexualized, serving to enable escape from anxieties related to passive impulses and to oedipal and post-oedipal activities. The author concludes that these propositions emphasize the essential difference in the investigation and therapeutic dynamics of transference neuroses and certain other defects of character.—*M. H. Erickson* (Eloise Hospital).

232. **Kreipe, K. Zur Methodik der Exploration.** (Concerning the method of exploration.) *Beih. Z. angew. Psychol.*, 1936, No. 72, 103-114.—Just as a good dramatist lives in the lives of each of his characters, so a good analyst must be able to experience various personality developments. This demands a rich and varied psychological experience, which can be aided by familiarity with the cultural products of a people. Psychological resonance is thereby developed. The author discusses various methods of exploration, some general and specific objects towards which exploration must be directed, the nature of the obtained material, and its manner of treatment. An objective point of view towards the subject is emphasized.—*G. F. J. Lehner* (Brown).

233. **Laforgue, R. Exceptions to the fundamental rule.** *Psychoanal. Quart.*, 1936, 3, 369-374.—Two types of patients present difficulty in applying the rule that the analyst repeat aloud everything coming to mind. The first group is composed of obsessional and anxiety patients, while the second group consists of patients having a "neurotic character," who, for ego reasons usually of an idealistic nature, consciously refuse to admit certain material from the unconscious. Insistence upon the rule defeats its purpose with both groups. The problem is met for the first group by yielding the issue temporarily and resolving the more remote obstacles which will lead finally to a comprehensive analysis which will include this symptom. The approach to the second group is through character analysis, since essentially the symptom is one of character resistance. An elastic application of the rule to fit the patient is recommended.—*M. H. Erickson* (Eloise Hospital).

234. **Oberndorf, C. P. Sigmund Freud—his work and influence.** *Amer. J. Psychiat.*, 1936, 93, 21-28.—An address which was read at the meeting of the American Psychiatric Association. Freud's work is reviewed as coming in three general periods: "(1) the

period of theory development (1885-1905), (2) the period of clinical application (1905-1920), and (3) the period of philosophical reflection (1920 to the present time)." The analogy is made in regard to theory and practice between psychoanalysis and the automobile.—*R. Goldman* (Boston Psychopathic Hospital).

235. **Romo, G.** Nietzsche précurseur de la psychanalyse. (Nietzsche as a forerunner of psychoanalysis.) *Evolut. psychiat.*, 1935, No. 1, 55-79.—*M. H. Piéron* (Sorbonne).

236. **Saltzman, B. N.** The reliabilities of tests of waking and hypnotic suggestibility. *Psychol. Bull.*, 1936, 33, 622-623.—Abstract.—*R. H. Brown* (Yankton).

237. **Santanelli, E.** Sulla suggestione sperimentale. (On experimental suggestion.) *Folia med., Napoli*, 1935, No. 14, 731-742.—The suggestion of an influx of force induced by contact between the experimenter and the subject is capable of increasing the muscular force of the latter. Results are better if the subject has his eyes open than if he is blindfolded. The measure of the results is individual, and may be related to normal or pathological conditions.—*G. M. Hirsch* (Rome).

238. **Sterba, E.** An abnormal child. *Psychoanal. Quart.*, 1936, 3, 375-414.—(First installment.) A detailed report, including anamnestic material, a description of the chief symptoms and their analytic solution, and an account of those parts of the treatment yielding the clearest understanding of the pathological structure, is given of a two-year psychoanalytic study and treatment of a precocious five-year-old boy whose symptomatology centered around an insatiable intellectual curiosity, grandiosity with much fantasy life, and a limitation of his emotional life to numerous phobic reactions and anxieties.—*M. H. Erickson* (Eloise Hospital).

[See also abstracts 12, 15, 172, 210, 251, 334, 501, 503, 511, 512.]

#### FUNCTIONAL DISORDERS

239. **Adamson, E. I.** So you're going to a psychiatrist. New York: Crowell, 1936. Pp. xii + 263. \$2.50.—A simply and popularly written account of modern psychiatric thought by a woman psychiatrist. Some key chapters are: our next-door neighbors, from intuition to intelligence, running from ghosts, nervous breakdown, queer people. A final chapter describes emotional health.—*J. McV. Hunt* (Brown).

240. **Adler, A.** The neurotic's picture of the world. *Int. J. indiv. Psychol.*, 1936, 2, No. 3, 3-13.—The neurotic sees everything through the eyes of his vanity. Since it is unlikely that others can be made to share his opinion that he should always occupy the position of ascendancy, he will have to re-view the world in harmony with the common view before he can live normally.—*M. F. Martin* (West Springfield, Mass.).

241. **Allendy, R.** La psychiatrie de Paracelse. (Paracelsus's psychiatry.) *Evolut. psychiat.*, 1934, No. 2, 3-17.—*M. H. Piéron* (Sorbonne).

242. **Anselmi, C.** Osservazioni grafologiche in alcune malattie mentali. (Graphological observations in certain mental diseases.) *Liguria med.*, 1935, No. 6, 144-151.—The diagnostic importance of the graphological examination.—*G. M. Hirsch* (Rome).

243. **Appel, K. E., & Strecker, E. A.** Practical examination of personality and behavior disorders; adults and children. New York: Macmillan, 1936. Pp. xiv + 219. \$2.00.—"The purpose of this manual is to guide the student in the technique of psychiatric observation . . . to be thought of as a laboratory manual similar to those used in other branches of medicine." Two parts, one for use with adults and the other with children, constitute the book.—*J. McV. Hunt* (Brown).

244. **Astwazaturow, M.** Über psychosomatische Beziehungen bei Kausalgie. (On psychosomatic relations in causalgia.) *Rev. Neurol. Psychiat., Praha*, 1936, 33, 97-101.—In developed causalgia various psychic experiences can cause a paroxysmal increase of pain. Pleasant and unpleasant news, music, and sometimes even the idea of dry heat increase pain. This led many to believe that causalgia was a neurotic condition. A general state of nervousness present in causalgia seemed to corroborate that belief. The author thinks, however, that the nervousness is an effect rather than a cause of causalgia. He is of the opinion that the transformation of psychic experiences into pain is determined by an increased sensitivity and repercussion of the thalamic centers of pain. These two, and not a sympathetic disturbance, seem responsible for the symptoms in causalgia.—*Z. Piotrowski* (Columbia).

245. **Baller, W. R.** A study of the present social status of adults who, when they were in elementary schools, were classified as mentally deficient. *Genet. Psychol. Monogr.*, 1936, 18, 165-244.—206 former special-class pupils over 21 and with IQ's under 71 were matched for sex, nationality, and age with subjects of IQ 100-120; 95% and 98% respectively of the two groups were found and studied. The subnormals had greater mobility but shorter mobility radius; their homes were economically and socially inferior; their schooling had been prolonged; their mortality rate was seven times that of the controls; fewer of them were married (but opportunities for many had been restricted by institutionalization); several times as many of them had committed infractions of the law; 61% of them had been unable to remain employed steadily. Early training for homemaking is stressed; it is suggested that the social performance of the subjects exceeded early prognoses. Review of 59 references.—*F. M. Teagarden* (Pittsburgh).

246. **Bena, E., & Apetaur, J.** Prícný prurez neurastenickými stavy dle ambulanti statistiky. (A cross-section of neurasthenic conditions on the basis of out-patient department statistics.) *Rev. Neurol. Psychiat., Praha*, 1936, 33, 465-503.—The data were collected from 804 patients, 457 males and 347 females. The age distribution was from 18 to 71 years; 4% were older than 53 years. The fre-

quency of neurasthenic complaints was calculated for the various age groups by comparison with the total population in each age group in the city of Prague, Czechoslovakia. Various subgroups were compared with each other, such as men and women, vocational groups, married, unmarried and divorced groups, those with few and those with many complaints, etc. A high degree of dissociation was found between motivated fear and unmotivated anxiety. The patients were asked for introspective accounts of their mental states. A number of neurophysiological tests were performed. Physical examinations were negative in all cases. The authors conclude that neurasthenia cannot be considered as a disease entity, on account of the great variety and low intercorrelation of the neurasthenic symptoms or complaints. There is a 3-page English summary. The tables have both Czech and English titles.—*Z. Piotrowski* (Columbia).

247. **Bermann, G.** *Patogenia de la neurosis obsesiva.* (Pathogenesis of obsessional neurosis.) *Psicoterapia*, 1936, 2, 13-29.—Some cases of obsessional syndromes are typical and pure. This fact enables classification. Associated forms (tinged with other neuroses) must be described. Psychoanalysis is the most satisfactory approach to both explanation and treatment. Bibliography.—*R. M. Bellows* (Occupational Research Program).

248. **Bermann, G.** *La obra de Jorge Thenon sobre la neurosis obsesiva.* (The work of Jorge Thenon on obsessional neurosis.) *Psicoterapia*, 1936, 2, 92-94.—Thenon has made a contribution of signal importance to the theory and technique of psychoanalysis.—*R. M. Bellows* (Occupational Research Program).

249. **Biltz, R.** *Psychogene Angina.* (Psychogenic angina.) *Beih. Zbl. Psychother.*, 1936, No. 1. Pp. 69.—Epicritical consideration of a case of tonsillitis and its psychopathology, with discussion of the case history; dream and organic sensations; couvade practices of savages, stories of male childbed illnesses; pubescence rites, primal scenes; positive and negative angina; the archaic world, emotion and inhibition, types of illness and their substrate; and an attempt to analyze sickness.—*G. F. J. Lehner* (Brown).

250. **Bisch, L. E.** *Be glad you're neurotic.* New York: Whittlesey House (McGraw-Hill), 1936. Pp. x + 201. \$2.00.—Popular discussion of neurosis with suggestions as to how neurotics may utilize their special characteristics.—*D. Shakow* (Worcester State Hospital).

251. **Bischler, W.** *Interprétation psychanalytique de la schizoïde.* (Psychoanalytic interpretation of the schizoid case.) *Evolut. psychiat.*, 1934, No. 2, 9-35.—*M. H. Piéron* (Sorbonne).

252. **Borel, A.** *L'expression de l'ineffable dans les états psychopathiques.* (The expression of the ineffable in psychopathic states.) *Evolut. psychiat.*, 1934, No. 2, 36-55.—*M. H. Piéron* (Sorbonne).

253. **Borel, A.** *Les convulsionnaires et le diacre.* (The convulsionnaires and the church officer.) *Evolut. psychiat.*, 1935, No. 4, 3-25.—*M. H. Piéron* (Sorbonne).

254. **Bosch, G., & Aberastury, F.** *Conceptos generales sobre la profilaxis neurotica.* (General concepts concerning the prevention of neuroticism.) *Psicoterapia*, 1936, 2, 78-80.—Several points for a program of mental hygiene for children are made. These are: psychological and psychopathic potentiality, environmental influences, physiological fitness, normality of development of emotional reactions, progressive sexual education, scientific vocational guidance, correction of early progressive neurotic symptoms, vocational training.—*R. M. Bellows* (Occupational Research Program).

255. **Boyd, D. A.** *A contribution to the psychopathology of Alzheimer's disease.* *Amer. J. Psychiat.*, 1936, 93, 155-175.—Contains a detailed report of the patients' behavior in a series of psychological examinations, involving tests for memory, attention, perception, association, motor performance, calculations, general intelligence, etc.—*R. Goldman* (Boston Psychopathic Hospital).

256. **Brandejš, M.** *Nekolik myšlenek o nove orientaci ustavu.* (A few remarks on reorganization of institutions for the mentally sick.) *Rev. Neurol. Psychiat.*, Praha, 1936, 33, 264-268.—Since the beginning of this century great contributions have been made to the problem of understanding mental diseases. Histopathological studies of the nervous system led to the conclusion that mental diseases were not curable and were responsible for the absence of serious therapeutic efforts. This skepticism and therapeutic inactivity are not justified in view of therapeutic possibilities and prevention of mental diseases which have been demonstrated in the last decades. Hospitals for the mentally sick should be reorganized according to the principles and results of mental hygiene.—*Z. Piotrowski* (Columbia).

257. **Burckhardt, G.** *Versuch einen Handgeschicklichkeitsprüfung an geistesschwachen Kindern.* (An investigation of manual dexterity in feeble-minded children.) *Z. Kinderpsychiat.*, 1936, 3, 77-80.—A study of 56 feeble-minded children, 8-16 years old, and 33 normal children to determine the relationship between feeble-mindedness and manual ability. The author found that motor functions in general, including manual ones, are affected in feeble-minded children in the direction of being slowed down and showing defective coordination.—*D. Shakow* (Worcester State Hospital).

258. **Canavan, M. M., & Clark, R.** *Second report on the mental health of dementia praecox stock.* *Bull. Mass. Dept. ment. Dis.*, 1935, 19, 17-23.—*R. R. Willoughby* (Brown).

259. **Cenac, M.** *L'hystérie en 1935.* (Hysteria in 1935.) *Evolut. psychiat.*, 1935, No. 4, 25-33.—*M. H. Piéron* (Sorbonne).

260. **Ceriac, M.** *La 9<sup>e</sup> conférence des psychiatres de langue française.* (The ninth conference of French-speaking psychiatrists.) *Evolut. psychiat.*, 1935, No. 1, 79-87.—*M. H. Piéron* (Sorbonne).

261. **Crespo, E. P.** *Las neurosis obsesivas y las fobias.* (Phobias and obsessional neuroses.) *Psicoterapia*, 1936, 2, 43-77.—Two detailed case studies

are reported. These are interpreted from a psychoanalytic viewpoint. Bibliography of 60 titles.—*R. M. Bellows* (Occupational Research Program).

262. **Crespo, E. P.** *El movimiento psicoterápico y psiquiátrico en la Europa actual.* (Psychiatric and psychotherapeutic movements in present-day Europe.) *Psicoterapia*, 1936, 2, 81-91.—A general picture of the present status of psychiatry as practiced in Germany and the Soviet Union.—*R. M. Bellows* (Occupational Research Program).

263. **Delaplane, J. P., Stuart, H. O., & Hart, C. P.** *Preliminary studies of a cerebral disorder in young chickens.* *Science*, 1936, 84, 396-397.—A disorder of chicks characterized by nervous involvements, particularly of the cerebellum, was observed last winter in Rhode Island. Chicks fed on a diet in which corn was the principal ingredient were the only ones showing this disorder in which the typical brain lesions were observed upon autopsy. Indications point to some factor or factors in the corn as responsible for or at least contributory to the disorder.—*F. A. Mote, Jr.* (Brown).

264. **De Rosa, G.** *L'evoluzione della terapia di occupazione negli ammalati di mente.* (The evolution of occupational therapy for mental patients.) *Osped. Psichiat.*, 1935, 3, 784-797.—The author discusses the value of occupational therapy, following its development through different periods, and describing in detail the organization of work in the psychiatric hospital at Naples.—*G. M. Hirsch* (Rome).

265. **Dickmeiss, P.** *Om exogene aethiologiske faktorer ved psykosis maniodepressiva med saerligt henblik paa encephalitis epidemica chronica.* (On exogenous etiological factors in manic-depressive psychoses with special reference to chronic epidemic encephalitis.) *Hospitalstidende*, 1936, 79, 774-781.—While the hereditary character of manic-depressive psychoses seems to be almost unanimously agreed upon, exogenous factors have been mentioned in connection with glandular changes or disturbances as well as in connection with the periods of puberty and menopause. Similarly, organic brain lesions have been looked upon as causative or contributing factors, especially those of encephalitis. The writer investigated the case histories of 137 encephalitic patients admitted during the last 8 years at the Community Hospital of Copenhagen. Several case histories are given and bibliography is appended.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

266. **Doll, E. A.** *Idiot, imbecile, and moron.* *J. appl. Psychol.*, 1936, 20, 427-437.—A threefold criterion is necessary for diagnosis of feeble-mindedness, namely, social incompetence, intellectual incompetence, and developmental arrest. "Idiocy, imbecility, and morosity are not mere successive stages of a mental age continuum, but are different categories of a common condition differing qualitatively as well as quantitatively from each other." Analysis of the above criteria of feeble-mindedness leads to the conclusion that some confusion now existing in diagnosis of mental status will be cleared up by such an instrument as the Vineland social maturity scale.—*R. S. Schultz* (Psychological Corporation).

267. **Doll, E. A.** *Report of research department.* *Train. Sch. Bull.*, 1936, 33, 118-124.—A large amount of work has been done with the Vineland social maturity scale. Data were gathered on 620 normal subjects for purposes of normative standardization. A survey of the institutional group with the scale was completed. The standardized revision was released at the meeting of the American Orthopsychiatric Association. The condensed manual was revised. Other studies were made on the p.e. of the Binet mental age; electric potentials, value of the Kent emergency test, birth injury data, identical twins, mental growth, motivation, and motor studies. The case load for the clinic totaled 665. 28 articles were accepted for publication.—*E. M. Achilles* (Columbia).

268. **Drachovský, J.** *Socialni význam chorob nervovych.* (The social significance of mental diseases.) *Rev. Neurol. Psychiat., Praha*, 1936, 33, 269-273.—The author briefly sketches the disintegrating effect of mental diseases upon social life and gives statistical data concerning the frequency, hospitalization, etc., of the mentally ill in the Czechoslovakian Republic for the years 1927-1932.—*Z. Piotrowski* (Columbia).

269. **Dreikurs, R.** *The problem of neurasthenia.* *Int. J. indiv. Psychol.*, 1936, 2, No. 3, 14-34.—Neurasthenia was popular when it was looked upon as the visible sign of overwork, especially mental overwork. The author discusses historically the neural and psychological theories of Beard, Kretschmer, Eppinger and Hess, Freud, Reich, and others, and illustrates by case histories some of his criticisms of these views. The earlier theories of nerve exhaustion are now replaced by "a new obscurity not much less mystical—the doctrine of human 'drives' and the impeding of their development in childhood. . . . A theory which comfortably puts all responsibility on 'drives' . . . is often welcomed . . . as a pat excuse for all the failures" in life.—*M. F. Martin* (West Springfield, Mass.).

270. **Dublineau, A.** *Réflexions à propos de quelques psychoses alcooliques.* (Reflections regarding certain alcoholic psychoses.) *Evolut. psychiat.*, 1934, No. 2, 55-79.—*M. H. Piéron* (Sorbonne).

271. **Dublineau, J.** *Signification psychopathologique de la schizophrénie.* (The psychopathological significance of schizophrenia.) *Evolut. psychiat.*, 1935, No. 4, 33-81.—*M. H. Piéron* (Sorbonne).

272. **Enríquez, R. G.** *El estado de peligro en los deficientes mentales.* (Antisocial tendencies among the feeble-minded.) *Manicomio*, 1936, No. 2, 35-43.—There are specific psychosomatic and social phenomena which enable antisocial propensities to be diagnosed. Most mental deficiencies present symptoms of this nature. Certain recommendations are made as reform measures.—*R. M. Bellows* (Occupational Research Program).

273. **Fröschels, E., & Ranschburg, P.** *Diskussion zur Arbeit von Prof. Ranschburg: Die kortikale Taubstummheit im Kindesalter.* (Discussion of the article by Prof. Ranschburg: Cortical deaf-mutism of childhood.) *Z. Kinderpsychiat.*, 1936, 3, 61-64.—Discussion by Fröschels of Ranschburg's

article (see X: 3319; 3573), answering remarks by Ranschburg, reply by Fröschels, and concluding remarks by Ranschburg.—D. Shakow (Worcester State Hospital).

274. Gjessing, H. G. A. Transitory word blindness associated with right homonymous hemianopia. *Arch. Ophthalm., Chicago*, 1936, 16, 5-7.—Reports a case of acquired dyslexia in which the patient first noted a difficulty on reading a letter dictated to his stenographer—he seemed to find it full of invectives, but when read to him it appeared as dictated. Examination revealed complete inability to read some words, while letters in others were confused in accordance with the phonetic law of Verner: *b* was read for *p*, *g* for *k*, *t* for *d*, *f* for *p*. Acuity was nearly normal, but there was a right homonymous hemianopia sparing central vision. Fields were nearly normal five weeks later and the patient was able to read faultlessly, but his general health was impaired and he died two months afterwards. Gjessing suggests that the visual recovery may be explained by the fact that the patient was partially left-handed; disturbance was in the left lobe, as indicated by the right hemianopia, while a lesion on the right side would be expected to cause dyslexia in left-handed individuals.—M. R. Stoll (Mass. Eye & Ear Infirmary).

275. Glanzmann, E., & Copulsky, N. Beiträge zur Kenntnis der Pyknolepsie im Kindesalter. (Contributions to the knowledge of pyknolepsy in childhood.) *Z. Kinderpsychiat.*, 1936, 3, 69-76.—First instalment of an article on pyknolepsy in children.—D. Shakow (Worcester State Hospital).

276. Gosline, A. J. Treatment of prepsychotic personalities of the schizoid and cycloid types. *Psychiat. Quart.*, 1936, 10, 454-463.—"This paper has tried to characterize schizoid and cycloid prepsychotic personalities, has dealt with treatment of incipient cases of schizophrenia and the manic-depressive psychoses, has stressed the existing difficulties due to the lack of experience and knowledge in changing personality and character traits. Prophylaxis has been pointed out as the salvation of the future, attention was called to the importance of child guidance, mental hygiene, parent education and proper child rearing in a sound milieu."—C. R. Atwell (Boston Psychopathic Hospital).

277. Hart, H. H. The bogey of abnormality. *Med. Rec., N. Y.*, 1936, 144, 311-313.—The author discusses the common attitude of fear manifested toward the abnormal, particularly in relation to the recognition of emotional factors in the origin of disease. He follows this with a general discussion of the "norm" in relationship to the individual personality, the ideal, the average individual and the average group.—M. H. Erickson (Eloise Hospital).

278. Jameison, G. E. Psychoses associated with hyperthyroidism. *Psychiat. Quart.*, 1936, 10, 464-479.—Thyroid disease ordinarily does not produce a psychosis. However, given a favorable background including familial and personality propensities, precipitating factors including prolonged physical and emotional stress may light up a latent thyroid disease, with an associated psychosis. The four cases cited showed different types of psychological response

(manic-depressive paranoid delusional state, severe hypochondriacal state, and an intense hallucinatory paranoid mixture). The common factors were: a history of prolonged stress, both physical and mental; gradual loss of weight over a period of time, then abruptly a more rapid loss, with at the same time a restless vaguely apprehensive state, seems to be prodromal to the acute onset of the frank psychosis. The psychosis may be ushered in by a toxic delirium; the moods and trends show no characteristic reaction type, although the clinical picture throughout shows definite evidence of the organic nature of the process. The preventive phase of therapy rests primarily upon an early recognition of the individual's propensities, with a watchful conservative attitude and a check on the general physical health. However, operation without a long period of preoperative preparation is inadvisable if the patient is on the verge of a psychosis. If a psychosis does develop, the patient belongs in a mental hospital. It is reasonable to believe that early treatment with a better understanding of the various factors involved would lessen the possibility of an unfortunate outcome.—C. R. Atwell (Boston Psychopathic Hospital).

279. Jelliffe, S. E. Children's problems: a generalized approach. *Amer. J. Orthopsychiat.*, 1936, 6, 406-411.—In a talk before the association of teachers of the feeble-minded, this author outlines his conception of "disharmonies in organ strivings" as the basis of every problem of maladjustment.—J. McV. Hunt (Brown).

280. Kahn, E., & Cohen, L. H. The way of experiencing as a psychiatric concept. *Psychol. Monogr.*, 1936, 47, 381-389.—Since the simple reflex-arc concept leaves no place for the experiencing individual, the authors propose an approach of a different kind: "The stimulus must be looked upon as an impression; out of the central connections references are established, by virtue of which meanings arise; and finally, the reaction is to be regarded as an expression." These four components of experience—impression, reference, meaning, expression—may be used to describe and understand normal and psychopathic personalities. In the sensitive personality "the emphasis appears to be upon the impression; his impressibility obviously gives a specific stamp to his way of experiencing, and one can understand the relationship of such impressibility to introspectiveness and introversion. In the hysterical the expressions are most striking; the nature of his expressibility seems to characterize his way of experiencing. For the paranoid, reference and meaning are the maelstrom into which any experience or group of experiences may be drawn; his reference-meaning capacity, in a sense, predominates over impression and expression." These and similar considerations "are not meant as formulations for another brand of psychiatric philosophy. They are presented, rather, as pragmatic concepts, as a basic working hypothesis for a psychiatric point of view."—K. F. Muenzinger (Colorado).

281. Krákora, S. Povera—blud. Príspevek for-  
ensne psychiatricky. (Superstition—delusion. A contribution to forensic psychiatry.) *Rev. Neurol.*

*Psychiat., Praha*, 1936, 33, 361-370.—The case of a moron who set fire to a farmhouse and was tried in court. The man acted apparently under the influence of an irresistible idea "that the devils which had harassed him would leave him in peace if he burned the house." The psychiatric experts felt that the defendant was not responsible at the time of committing the crime because he was in a delusional state.—Z. Piotrowski (Columbia).

282. Laforgue, R. Contribution à l'étude de la schizophrénie. (Contribution to the study of schizophrenia.) *Evolut. psychiat.*, 1935, No. 3, 81-96.—M. H. Piéron (Sorbonne).

283. Lewis, N. D. C. The pathology of mental disorders. *N. Y. St. J. Med.*, 1936, 36, 1101-1108.—R. R. Willoughby (Brown).

284. Luff, M. C., & Garrod, M. The after-results of psychotherapy in 500 adult cases. *Brit. med. J.*, 1935, July 13, 54-59.—R. R. Willoughby (Brown).

285. Malzberg, B. Mental disease among native and foreign-born whites in New York state. *Amer. J. Psychiat.*, 1936, 93, 127-137.—The unfavorable ratio between the two populations, indicating a greater number of first admissions for the foreign group, is spurious, and is due to a large extent to the age composition of the foreign group. Three series of comparisons are made: on the basis of "crude" rates, rates standardized with respect to environment, and rates standardized with respect to environment and age. It is found that adjustment for economic and occupational status greatly reduces the difference between the native and foreign-born populations. When the rates for each group were standardized according to both environment and age they were found to be practically equivalent for cerebral arteriosclerosis, general paresis, and alcoholic psychoses; in the manic-depressive psychoses a greater rate for foreign-born is found, but this would probably be further reduced by finer measures; the excessive rate of the foreign-born in the dementia praecox group, even if treated further, would "in all probability . . . still remain in significant excess." The conclusion is that there is no evidence to indicate the existence of intra-racial differences within the white race.—R. Goldman (Boston Psychopathic Hospital).

286. Manzoni, B. Il problema degli anormali scolastici nel Cantone Ticino. (The problem of abnormal school children in the Canton of Ticino.) *Z. Kinderpsychiat.*, 1936, 3, 81-88.—The first installment of a report based on the results of the censuses of 1916-1917 and 1932-1933.—D. Shakow (Worcester State Hospital).

287. Masson, A. Le travestissement. Essai de psycho-pathologie sexuelle. (Transvestitism. Essay on sexual psychopathology.) Paris: Le François, 1935. Pp. 144.—The author gives the historical facts on transvestitism, listing and classifying the psychiatric data gathered since the time of Esquirol. She presents the traits which are constantly found in such cases and constructs a "vestimentary syndrome" to which she gives a definite place in the categories of sexual psychopathology.—M. H. Piéron (Sorbonne).

288. Milici, P. Simulated foolishness and mental puerilism in the psychoses. *Psychiat. Quart.*, 1936, 10, 417-437.—The mental trait of childishness is often carried over into a psychosis to color it with childish manifestations and with the symptoms of foolish or silly behavior. The psychosis appears to be definitely the result of the immediate stress and a means of avoiding the stress; recovery usually follows removal of the disagreeable setting. Cases are cited, and it is believed that they illustrate the absence of a rigid distinction between the neuroses and the biogenetic psychoses, and that they corroborate Hoch's doctrine of the similarity of structure between cases of dementia praecox accessible to analysis and the purpose psychoses. The writer believes in the "fundamental importance of the psychogenic material," that "not only the so-called psychoneuroses or minor psychoses, but also the more unintelligible types dissolve themselves to a far-reaching extent into reactions not so foreign to normal human experience" and that there are many common links with the normal. "The main contrasts or extremes are the cases with a strong constitutional bias requiring but little extraneous or circumstantial etiological factors. The essential in both extremes and in the intermediary cases is the break of compensation of adjustment with the peculiar attempts at balance and reconstruction which constitute the glaring surface picture of the clinical description and the special mechanisms of the analytical consideration."—C. R. Atwell (Boston Psychopathic Hospital).

289. Millán, A. Consideraciones generales sobre la situación legal de los alienados en México. (General considerations upon the legal situation of aliens in Mexico.) *Manicomio*, 1936, No. 2, 5-14.—Serious defects of existing insanity legislation are cited and a plea is made for legal reform.—R. M. Bellows (Occupational Research Program).

290. Minskowska, F. L'hérédité dans la schizophrénie et dans l'épilepsie. (Heredity in schizophrenia and epilepsy.) *Evolut. psychiat.*, 1936, No. 2, 45-67.—M. H. Piéron (Sorbonne).

291. Montassut, M. Politiques morbides de la maladie. (Morbid policies in disease.) *Evolut. psychiat.*, 1935, No. 2, 45-77.—M. H. Piéron (Sorbonne).

292. Morgenthaler, W. Neurologie, Psychiatrie, Psychotherapie. (Neurology, psychiatry, psychotherapy.) *Zbl. Psychother.*, 1936, 9, 25-36.—A discussion of the respective fields of these specialties, the contrasting types of neurologist, psychiatrist and psychotherapist, and the advantages and limitations of each. The true affiliations of neurology are with organic medicine, not with psychology, psychiatry and psychotherapy, the center of all of which is intuition. The psychiatrist is the man who takes the long view and emphasizes uniformity and general laws; the psychotherapist is the intensive worker with few cases, who is at the same time isolated and close to life.—M. E. Morse (Baltimore).

293. Mowrer, O. H., & Mowrer, W. M. C. A new method for the study and treatment of enuresis.

*Psychol. Bull.*, 1936, 33, 611-612.—Abstract.—R. H. Brown (Yankton).

294. Mulier, M. Quelques mécanismes de guérison dans la schizophrénie. (Certain methods of treatment in schizophrenia.) *Evolut. psychiat.*, 1934, No. 2, 79-95.—M. H. Piéron (Sorbonne).

295. Murphy, M. A follow-up study of twenty-four feeble-minded children of the mongol type. *Psychol. Bull.*, 1936, 33, 612.—Abstract.—R. H. Brown (Yankton).

296. Myerson, A., Ayer, J. B., Putnam, T. J., Keeler, C. E., & Alexander, L. Eugenical sterilization: a reorientation of the problem. New York: Macmillan, 1936. Pp. 211. \$3.00.—This report of the committee of the American Neurological Association for the investigation of eugenical sterilization examines the fundamental questions involved in the problem. Terms are defined, existing legislation examined, and an inquiry made into the composition of some of the groups which have taken sides for and against sterilization. The field of genetic knowledge is briefly surveyed, and newer experiments concerned with the interplay of the environment with the genetic substance are cited. The evidence for and against the inheritance of individual nervous and mental diseases is critically evaluated, and special emphasis is given newer studies concentrated upon individual clinical entities. Finally, after registering disappointment at the paucity of valid work in the subject, the committee makes its recommendations concerning the limitations of present knowledge, concerning the nature and execution of future legal provisions for sterilization, and concerning future research.—J. McV. Hunt (Brown).

297. Opedal, L. E. Jim's Frankenstein. *Int. J. indiv. Psychol.*, 1936, 2, No. 3, 35-45.—A 19-year-old boy is shown that his symptoms and obsessions are self-made, resulting from his belief that he should always be first.—M. F. Martin (West Springfield, Mass.).

298. Page, J., & Landis, C. The marital factor in mental disease. *Psychol. Bull.*, 1936, 33, 612.—Abstract.—R. H. Brown (Yankton).

299. Passanisi, I. Iperpituitarismo e traumi psicosensoriali. (Hyperpituitarism and psychosensory traumata.) *Boll. Soc. ital. Biol. sper.*, 1935, 10, 406-409.—After producing in blinded male cocks an experimental hyperpituitarism, either by grafting or by parenteral introduction of hypophyseal hormones, the author observed the presence of the same endocrine condition as in cases of organic and psychic trauma of the brain.—G. M. Hirsch (Rome).

300. Pérez, R. C. Un esquema y un caso de psico-neurosis obsesiva. (A case of obsessional psycho-neurosis and its explanation.) *Psicoterapia*, 1936, 2, 30-42.—The author's theory follows Freud, Minkowski, Hesnard and Regis. The case described confirms his approach.—R. M. Bellows (Occupational Research Program).

301. Picard, J. Les parentés psychologiques et cliniques de l'épilepsie et de la psychose maniaque dépressive. (The psychological and clinical relation-

ship between epilepsy and the manic-depressive psychosis.) *Evolut. psychiat.*, 1934, No. 4, 59-75.—M. H. Piéron (Sorbonne).

302. Pollock, H. M., Malzberg, B., & Fuller, R. G. Hereditary and environmental factors in the causation of dementia praecox and manic-depressive psychoses. Chapter V (continued). Environmental factors in manic-depressive psychoses. *Psychiat. Quart.*, 1936, 10, 495-509.—The environmental factors are discussed under the following headings: how long did patient remain under parental care; dissension in home during childhood of patient; relations between patient and parents (attitudes); institutional care during patient's early childhood; physical condition and development of patient during first five years of life; childhood activities of patient; attitude during pre-adolescent period toward playmates of own and opposite sex; adolescent activities of patient; attitude in adolescence toward associates of own and opposite sex; school record of patient; reason for leaving school; attitude toward school.—C. R. Atwell (Boston Psychopathic Hospital).

303. Querido, A. Home care of the mental patient. New York, London: Oxford Univ. Press, 1936. Pp. 93. \$1.00.—There are 6 chapters in which are discussed: (1, 2) the concept of insanity and the care of the insane, (3) diseases of the intellectual faculties, (4) diseases of the emotional life, (5) diseases of the structure of the personality, (6) disharmonic personalities. The theme of the book is "patience, devotion, and an accommodating spirit, in one word—love."—J. McV. Hunt (Brown).

304. Repond, A. Quelques réflexions sur les bases scientifiques et l'hygiène mentale et ses applications. (Certain considerations on the scientific bases and applications of mental hygiene.) *Evolut. psychiat.*, 1935, No. 1, 37-55.—M. H. Piéron (Sorbonne).

305. Robin, G. La neuro-psychiatrie et la neuro-psychologie infantiles. (Child neuro-psychiatry and neuro-psychology.) *Evolut. psychiat.*, 1936, No. 2, 67-77.—M. H. Piéron (Sorbonne).

306. Roemer, H. Zur nosologischen und erb-biologischen Beurteilung der Puerperalpsychosen. (Puerperal psychoses from the points of view of nosology and genetics.) *Z. ges. Neurol. Psychiat.*, 1936, 155, 555-591.—Puerperal psychoses are defined as those psychoses demonstrably connected with childbirth. On the basis of 30 cases, the writer presents a classification of the important clinical forms and their etiological factors. There are two main groups—endogenous (represented especially by manic-depressive insanity and schizophrenia), and exogenous (represented by amentia and delirium). Between the two extremes lie various mixed syndromes. Bibliography.—C. W. Fox (Rochester).

307. Rosenzweig, S. Some implicit common factors in diverse methods of psychotherapy. *Amer. J. Orthopsychiat.*, 1936, 6, 412-415.—Inasmuch as such widely divergent forms of psychotherapy as Christian Science, psychoanalysis, treatment by persuasion, etc., all have cures to their credit, the argument from therapeutic success to the validity of the theory involved falls, and one must question

whether the factors alleged to be operating in any given therapy are the factors actually operating. The writer finds (1) the operation of implicit, unverbilized factors, such as catharsis, (2) the as yet undefined effect of the personality of the good therapist, and (3) the formal consistency of the therapeutic ideology as a basis for re-integration, common to these diverse forms of therapy. It is argued that the psychological events involved are so many-sided and complex that they may be alternatively formulated with considerable justification for each alternative, that personality seems to consist in an interdependent organization of various factors, and that these facts reduce the effectual importance of mooted differences between one form of psychotherapy and another.—*J. McV. Hunt* (Brown).

308. Rossi, S. C. La "psicoterapia etiologica." (Etiological psychotherapy.) *Psicoterapia*, 1936, 2, 6-12.—There is neither a clinical nor an exclusively somatic picture of psychoneurosis. The psychical treatment is directed against the concrete idea-affective elements which are discriminated as a result of the clinical approach.—*R. M. Bellows* (Occupational Research Program).

309. Rouvroy, C. Les études expérimentales de l'intelligence chez les malades mentaux. (Experimental studies of intelligence in mental patients.) *J. belge Neurol. Psychiat.*, 1936, 36, 479-529.—This is a systematic report on psychometric studies of intelligence in mental patients. The article discusses: (1) definition of intelligence; (2) procedures in psychiatric mental testing, including a discussion of their usefulness, difficulty of application, and validity of results; (3) results in different psychopathological conditions; (4) the nature of the diminution of intelligence; (5) conclusions. In conclusion the author states that at present there does not exist any adequate instrument for measuring the intelligence of mental patients. Experimental researches give evidence of alterations in intelligence, of which the most clearly established is a quantitative one, namely a diminution of intelligence. No intellectual level or degree of deterioration could be found characteristic of any particular mental disorder. Qualitative alterations of intelligence have been less studied experimentally and the conclusions are not definite. Continued experimental investigation of intelligence changes in mental patients promises to add considerable knowledge to the field of psychiatry. A bibliography of 88 titles is given.—*H. Syz* (Cornell).

310. Saric, D. Palmo-oralni poruchy citlivosti. (Palmar and oral disturbances of sensibility.) *Rev. Neurol. Psychiat.*, Praha, 1936, 33, 560-564.—History and description of a 66-year-old female patient with a left thalamic syndrome of arteriosclerotic origin. The outstanding subjective feelings were of quivering and hyperesthesia. These started at the same time and were of remarkable persistence, without any apparent change in intensity. They were localized in the radial part of the palm and in the right halves of the lips.—*Z. Piotrowski* (Columbia).

311. Schüchter, M. Troubles somato-psychiques postencéphaliques prenant l'allure de syndromes

épiphyseaux. (Post-encephalitic disturbances resembling epiphyseal syndromes.) *Z. Kinderpsychiat.*, 1936, 3, 37-42.—*D. Shakow* (Worcester State Hospital).

312. Schiff, P. Les anormaux devant la refonte du code pénal. (Condition of abnormal individuals before the reform in the penal code.) *Evolut. psychiat.*, 1934, No. 4, 75-95.—*M. H. Piéron* (Sorbonne).

313. Sebek, J. Psychomotorické syndromy encefalické. (Psychomotor encephalitic syndromes.) *Rev. Neurol. Psychiat.*, Praha, 1936, 33, 565-569.—In five cases 18 to 21 years of age with encephalitic parkinsonian syndromes the author observed, besides weak hysterical signs, typical hysterical contractures of the extremities and crises of Charcot's "grande hystérie." The hysteria was not superimposed on the encephalitic process. The hypothesis that the hysterical syndromes in encephalitis are caused by an anatomical lesion in the extrapyramidal system cannot be sustained. In view of Haskovec's theory on the significance of the subcortical structures for mental functions and in view of his localization of consciousness in the diencephalon, one should conclude that functional changes in the psychovegetative mechanism, caused by the activity of the encephalitic virus, contribute to the origin of hysterical psychomotor syndromes in encephalitis.—*Z. Piotrowski* (Columbia).

314. Sexauer, H. Zur psychologischen Struktur des schizophrenen Raumerlebens. (The psychological structure of schizophrenic space experience.) *Z. ges. Neurol. Psychiat.*, 1936, 154, 811-827.—Basing his discussion upon one case study and the available literature, the writer considers the significance of the emotional aspect of experience in determining psychological space. While the patient complained of his loss of grasp of space, his everyday behavior showed complete orientation. The disorder appeared to be due to the disturbance of certain affective relationships, the meaning of a unified "biographical" space being lost.—*C. W. Fox* (Rochester).

315. Shakow, D., & Huston, P. E. Studies of motor function in schizophrenia. I. Speed of tapping. *J. gen. Psychol.*, 1936, 15, 63-103.—Using an alternate tapping key apparatus, a study of speed of movement was made on 123 schizophrenic, 60 normal, and 13 manic-depressive subjects. The schizophrenics gave significantly lower mean scores and showed higher variation than did the normals. The schizophrenics showed improvement from session to session, but the normals did not. Age, duration of psychosis, educational and occupational levels, and time of day seemed to have little effect on the score. The differences between normal and schizophrenic subjects were largely due to attitude or co-operation, and tended to disappear when this factor was taken into account. The diagnostic types of schizophrenia differed in various ways.—*H. Schlosberg* (Brown).

316. Shuey, H. The relationship of body build to mental disease and behavior problems. *Bull. St. Instn. Ia*, 1936, 38, 10-19.—*R. R. Willoughby* (Brown).

317. Stengel, E. *Zur Lehre von den transcorticalen Aphasien.* (On the theory of the transcortical aphasia.) *Z. ges. Neurol. Psychiat.*, 1936, 154, 778-782.—In the initial stage of aphasia, certain patients show surprisingly good use of language in completing sentences begun slowly by other persons, even though otherwise they exhibit little or no understanding of language. This fact is interpreted in terms of Freud's identification, characterized by adoption of the intentions of another individual. The reactions appear spontaneously. If, in these cases, the sentence is completed by the other person, the patient tends to show echolalia, by repeating the last part of the sentence. The four cases studied by the writer suggest that the capacity for anticipation may not be entirely lost in certain individuals with seriously injured brains.—C. W. Fox (Rochester).

318. Stidl, O. *Sippschaftsuntersuchungen an schwachsinnigen Kretinoiden eines Allgäuer Untersuchungsbezirkes.* (Pedigree studies on feeble-minded cretinoids in an Allgäu experimental region.) *Z. ges. Neurol. Psychiat.*, 1936, 154, 408-421.—R. R. Willoughby (Brown).

319. Targowla, R. *L'intuition delirante.* (Delusional intuition.) *Rev. Neurol. Psychiat., Praha*, 1936, 33, 250-255.—The author defines delusional intuition as an idea which appears in the patient's consciousness spontaneously and suddenly with irresistible force, which the patient accepts as his own personal conviction and not as coming from outside sources, and the validity of which he does not question. It seems to be a less disintegrated mental phenomenon than the so-called true sensory hallucination, as it appears in place of the true hallucination when the patient is on his way to recovery. It may of course lead also to tragic and violent acts by the patient. The delusional intuition is a psychotic symptom. The author exemplifies it from clinical material obtained from several psychotics.—Z. Piotrowski (Columbia).

320. Trapp, C. E. *Notes on the psychiatric knowledge of the classical era.* *Med. Rec., N. Y.*, 1936, 144, 325-326.—The author discusses briefly the recognition of the various neuropsychiatric entities and the contributions made to psychiatry in the Golden Age of Greece, particularly as shown by the works of Hippocrates, Soranus, Aretaeus, Plato and Aristotle.—M. H. Erickson (Eloise Hospital).

321. Treichler, R. *Die seelische Erkrankung Friedrich Hölderlins in ihren Beziehungen zu seinem dichterischen Schaffen.* (The mental derangement of Friedrich Hölderlin in relation to his poetic creation.) *Z. ges. Neurol. Psychiat.*, 1936, 155, 40-144.—The mental derangement of "organic totality of pathological phenomena" of the German poet is here studied in relation to his literary productions. Following Kretschmer, the writer distinguishes Hölderlin's psychopathic state and disease process (schizophrenia). The former is considered from the three points of view of sensitive character, schizoid psychopathic make-up, and cyclothymic components. In connection with this is given an analysis of Hölderlin's poetic development from adolescence to adulthood.

Subsequent sections deal with the poet's schizophrenic disease process and the schizophrenic terminal state, each in connection with certain aspects of his writing. Extensive bibliography.—C. W. Fox (Rochester).

322. Uchida, Y. *Jikkenteki ishi shogai ni okeru seishin sagyo no henka.* (Mental work in experimental will disturbance.) *Taiiku Kenkyu*, 1935, 3, Pp. 17.—A certain symptomatic similarity was reported between voluntary disturbance which is characteristic of schizophrenia or schizoid personalities and that of a mescaline-intoxicated subject. Catalepsy, apraxia, suggestibility, stereotypy and other catatonic symptoms appeared in the state of intoxication.—R. Kuroda (Keijo).

323. Uchida, Y., & Togawa, Y. *Jikkenteki seishin shogai. I.* (Experimental mental disturbance. I.) *Taiiku Kenkyu*, 1935, 3, Pp. 23.—A case study dealing with mental disturbance caused experimentally by mescaline intoxication, with special reference to perception, cognition, conscious states, thought and emotion.—R. Kuroda (Keijo).

324. Uchida, Y., & Togawa, Y. *Jikkenteki seishin shogai. II.* (Experimental mental disturbance. II.) *Taiiku Kenkyu*, 1936, 3, Pp. 48.—A definite decrease in amount of mental work, a small decrease in impressibility, intense perseveration tendency, slow and indirect association, irregularity in reaction times, richness of imagination content, positive and negative after-images appearing successively and very vividly notwithstanding that they are very labile (being altered by other hallucinations), irregular judgment in weight discrimination, keen olfaction, and dull gustation were observed in the subjects intoxicated with mescaline.—R. Kuroda (Keijo).

325. Uchida, Y., & Togawa, Y. *Jikkenteki seishin shogai. III.* (Experimental mental disturbance. III.) *Taiiku Kenkyu*, 1936, 3, Pp. 27.—Generally speaking, in mescaline intoxication is found evidence of hypersensitivity of the general senses except gustation, overestimation of time intervals connected with a feeling of tediousness, visual hallucinations differing somewhat with individuals, a feeling of novelty toward common objects, euphoria, depression, unrest, decline of memory and association, voluntary action, and self-dissociation. The authors think that eidetic images, hallucinations caused by mescaline intoxication, and hallucinations in schizophrenia, normal adults and children come from the same mechanisms.—R. Kuroda (Keijo).

326. Ujhely, V. *Polysynthetic extroversion therapy for the reduction of catatonic attacks.* *Amer. J. Orthopsychiat.*, 1936, 6, 449-458.—Report of a single case of catatonia in which the method consisted of "active interferences on all biopsychologic levels, treating the whole personality as a dynamic system of several hierarchic functional layers."—J. McV. Hunt (Brown).

327. Voelker, C. H. *Prophylactic technic for spasmophemia in mongols.* *Amer. J. Orthopsychiat.*, 1936, 6, 440-441.—For mongols, Robbins' prophylactic technique, in which stuttering is attacked as though it were mispronunciation, is indicated.—J. McV. Hunt (Brown).

328. Wernøe, T. *Elektrodetals-bestemmelser.* (Determination of electrode numbers.) *Hospitals-tidende*, 1936, 79, 1109-1125.—The writer describes his own method for determination of "electrode numbers" and offers results of such determinations from the galvanic-electric investigation of a group of 194 patients, of whom 38 had central organic nervous ailments, 40 had peripheral organic nervous ailments, 61 suffered from miscellaneous neuroses and 55 from ailments of extra-neural tissues (muscle diseases of the joints, endocrine disturbances, etc.). Bibliography, mainly of German titles.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

329. Wilde, R. W. *Health, sickness and psychology.* New York: Oxford Univ. Press, 1936. Pp. vii + 201. \$1.25.—A non-technical discussion of some elementary aspects of mental health, explaining and illustrating by case histories defense mechanisms, neuroses, compensatory and compulsive acts, the unconscious mind, and the power of mind over body through the endocrine glands and autonomic nervous system. The production of tension in the unconscious through the violation of instincts (of self, sex and society) is responsible for much ill health. All functional sickness is the result of mental causes, and possibilities for cure lie in treatment by psychoanalysis, which recovers and re-adjusts not only repressed memories but their accompanying emotions. "It would be wise to regard it [psychological treatment] as one regards a surgical operation—as justified only when it is to remove a worse evil."—*M. P. Montgomery* (Faribault, Minn.).

330. Wilson, I. G. H. *A study of hypoglycemic shock treatment in schizophrenia.* London: H. M. Stationery Office, 1936. Pp. 741. 1s. 3d.—*R. R. Willoughby* (Brown).

331. Wimmer, A. *Speciel klinisk psykiatri for studerende og læger.* (Special clinical psychiatry for students and physicians.) Copenhagen: Levin and Munksgaard, 1936. Pp. 529.—A general textbook in psychiatry.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

332. Yaskin, J. C. *The psychoneuroses and neuroses. A review of 100 cases with special reference to treatment and end results.* *Amer. J. Psychiat.*, 1936, 93, 107-125.—The measures used fall into three categories: purely psychological, partly psychological and partly physiological, and purely physiological. Encouragement, suggestion, rationalization and persuasion, attempts at compromise formation, education and reeducation, partial analysis and psychoanalysis comprise the first group. It was found that "attempts at compromise formation and partial analysis were probably the most effective methods of influencing underlying etiological factors, especially in anxiety hysteria and in compulsive-obsessive reactions."—*R. Goldman* (Boston Psychopathic Hospital).

[See also abstracts 55, 71, 124, 163, 198, 223, 238, 349, 380, 382, 386, 408, 413, 496.]

#### PERSONALITY AND CHARACTER

333. Adler, C. A. *Richard III—his significance as a study in criminal life-style.* *Int. J. indiv. Psychol.*,

1936, 2, No. 3, 55-60.—Shakespeare's Richard III is interpreted. He was the youngest child, forever striving to overtake his three older brothers. Hump-backed and deformed, rejected by his mother, early finding in boldness and activity the only means to the success he sought, egocentric, ambitious, more afraid of women than of men, he wants to conquer his murdered opponents even by possessing their ladies. Outwardly successful, he is always disappointed and insecure. The purification effected by tragedy is found in the understanding of such antisocial behavior as Richard's.—*M. F. Martin* (West Springfield, Mass.).

334. Bartlett, M. E. *Relation of suggestibility to other personality traits.* *J. gen. Psychol.*, 1936, 15, 191-196.—The scores made by 52 abnormal subjects on the Hull sway test show little relation to those made by the same subjects on various parts of the Bernreuter inventory. Suggestibility showed a slight positive correlation with Maller's habit pattern and with readiness to confide. Other tendencies were found in specific groups of subjects.—*H. Schlosberg* (Brown).

335. Beck, S. J. *Autism in Rorschach scoring: a feeling comment.* *Character & Pers.*, 1936, 5, 83-85.—Bleuler and Bleuler (see X: 2094) are criticized for admonishing one using the Rorschach test to "feel himself into" every response made by the subject. There is need for fixed standards rather than greater subjectivity in scoring this widely used test. It is the personality of the client and not that of the examiner that is to be reflected.—*M. O. Wilson* (Oklahoma).

336. Birnbaum, F. *Some principles to be observed in a healthy conduct of life.* *Int. J. indiv. Psychol.*, 1936, 2, No. 3, 46-54.—Five principles are suggested: (1) sovereignty (assuming full responsibility for oneself); (2) solidarity (taking into account the common natural ties among all human beings, including the most distant); (3) initiative; (4) productiveness; and (5) meliorism (accepting the world not as a de facto existence but as a task).—*M. F. Martin* (West Springfield, Mass.).

337. Bryn, D. *The problem of human types: comments and an experiment.* *Character & Pers.*, 1936, 5, 48-60.—Rorschach's types (extratensive and introvertive) and those of Jaensch (outward-integrated and inward-integrated) do not correlate; they are not the same. Tests used for measuring the latter deal with much more elementary functions than those for measuring the former.—*M. O. Wilson* (Oklahoma).

338. Dunlap, J. W. *Relationships between constancy of expressed preferences and certain other factors.* *Psychol. Bull.*, 1936, 33, 602-603.—Abstract.—*R. H. Brown* (Yankton).

339. Frankel, F., & Benjamin, D. *Die Kritik der Versuchsperson beim Rorschachschen Formdeutversuch.* (Criticisms by the subject in the Rorschach test on interpretation of forms.) *Schweiz. Arch. Neurol. Psychiat.*, 1934, 33, 9-14.—The way the subject gives his interpretation may be of clinical significance. Subjects who voluntarily criticize

the tests are characterized by feelings of inferiority. Manic cases show the same tendencies.—*H. E. Burr* (Ohio State).

340. George, R. W. The significance of the fluctuations experienced in observing ambiguous figures and in binocular rivalry. *J. gen. Psychol.*, 1936, 15, 39-61.—This study was designed to test certain aspects of McDougall's theory of introversion-extraversion. A special rating scale was developed to separate E-I, as defined by McDougall, from other traits, as A-S. Tests of reversible perspective and of binocular rivalry correlate with the results of the rating scale. The results obtained on the tests are discussed in detail, including the effects of drugs (sodium amytal, caffeine), sex, and age. A number of suggestions for additional work are presented.—*H. Schlosberg* (Brown).

341. Hartzfeld, C. A. J. Over meerdere en mindere waardeering van den "schijn" als typologisch kenmerk. (On the relative recognition of the "imaginal" [ideal] as a typological attribute.) *Ned. Tijdschr. Psychol.*, 1936, 4, 69-76.—Discussion of the adjustment tendencies of idealists vs. realists and a defense of the use of these latter terms in a typological psychology. Considerations of James, Freud, Jung, Adler, Kretschmer, and others are presented.—*O. N. de Weerd* (Beloit).

342. Keilhacker, M. Typische Unterschiede menschlicher Charaktere im Kriegs- und Gefechts-erlebnis. (Typical differences of human character in war and combat experience.) *Beih. Z. angew. Psychol.*, 1936, No. 72, 25-47.—Three primary factors influence individual attitudes and reactions towards war: profession, nationality, and individual differences. (1) The peasant fears and hates war because it may entail loss of his means of livelihood. The industrial worker considers war as a technical cataclysm, the physician as an outlet for superfluous energy, the priest as the punishing hand of God. (2) The French are brave, but have little perseverance; the Germans are steady, thorough and well disciplined; the English are hardy and enduring, the Russians fatalistically courageous, the Japanese highly capable. (3) Individuals are of two main types: (a) the professional military type, for whom war is a joy, and (b) the non-military type, who engage in it only when forced to or out of a sense of duty.—*G. F. J. Lehner* (Brown).

343. Olson, W. C. The waiver of signature in personal reports. *J. appl. Psychol.*, 1936, 20, 442-450.—The Woodworth-Mathews personal data sheet was filled out by two groups of college women under instructions both for anonymity and signature. Under initial conditions of no signature more symptoms are reported and the percentage frequencies are higher for items on general feelings of unreality, boredom, desire for escape and specific physical symptoms with a neurotic implication. Questions on likes, specific fears, and impulsions show no significant differences. A table of frequencies of response for each question and total score under both conditions is included.—*R. S. Schultz* (Psychological Corporation).

344. Pfahler, G. System der Typenlehren. (A system of type doctrines.) Leipzig: Barth, 1936. Pp. 334. RM. 18.—*G. F. J. Lehner* (Brown).

345. Pichon, E. La polarisation masculine-féminine. (Masculine and feminine polarization.) *Evolut. psychiat.*, 1934, No. 3, 59-96.—*M. H. Piéron* (Sorbonne).

346. Ribeiro, L. Il problema medico-legale dell'omosessualismo. (The medico-legal problem of homosexuality.) *Arch. Antrop. crim.*, 1936, 56, 425-436.—Drawing material both from the literature and from a series of cases studied in Brazil, homosexuality is studied from the aspects of cause, therapy, and legislation. A brief critical review is given of various theories of causation—the influence of the sex glands, of the endocrine system in general, of environmental factors with or without psychic trauma, and of certain physical abnormalities. The author believes that homosexuality is referable to physical type, as determined by the endocrine system as a whole. Illustrated with 10 plates.—*C. J. Herrick* (Pennsylvania).

347. Rundquist, E. A., & Sletto, R. F. Personality in the depression; a study in the measurement of attitudes. Minneapolis: Univ. Minnesota Press, 1936. Pp. 398. \$4.00.—The chief purpose of the research of which this monograph is a report was to measure the effect of the depression on the attitudes of individuals. Six scales were designed and administered to approximately 3000 persons, including high school students, college students, persons on relief, teachers, and other adults. The scales were constructed to measure morale, feelings of inferiority, family adjustment, economic conservatism, attitudes toward law, and the value of education. Great emphasis was laid on improving details of attitude scale construction and the analysis and interpretation of the test results. Differences were found between employed and unemployed as regards attitude toward the economic order. The lower occupational groups showed the greatest differences. Attitudes were importantly conditioned by age, by the situation of living at home or away from home, and by whether or not either or both of the parents were unemployed. Men who received relief were not characterized by feelings of inferiority or unfavorable attitudes toward the family. "Differences between employed and unemployed young women were small and were confined chiefly to the morale and educational scale." Fundamental improvements were made in personality measurement, especially in relation to the measurement of attitudes.—*C. R. Carpenter* (Bard College).

348. Ruppert, H. Das psychologische, charakterologische und anthropologische Denken. (Psychological, characterological, and anthropological thinking.) *Beih. Z. angew. Psychol.*, 1936, No. 72, 48-86.—The subtitle of this paper is: A preface to an "inner method of practical anthropology." In attempting to obtain accurate knowledge of man, it is important that the methods and sources of knowledge be critically examined in each of the three necessary approaches: the psychological, characterological, and anthropological. The various techniques in each of these are discussed. All aim at an under-

standing of the origin, totality, activity and form of individual (and racial) psychological differences. The psychological approach offers the best chance for a correct, factual and differential approach to anthropology, but characterological thinking is more plastic, concrete and practical. The anthropological approach has as its object of thought categorical theory and the analysis of the fundamental situations: (1) the metaphysical, (2) the social, and (3) the individual, each of which has its influence upon the psychological nature of the individual and the race.—*G. F. J. Lehner* (Brown).

349. *Schroder, P. Psychopathic personality and character abnormality.* *Bull. Mass. Dept. ment. Dis.*, 1935, 19, 1-6.—*R. R. Willoughby* (Brown).

350. *Walther, R. H. Die Praxis der Formulierung charakterologischer Befunde.* (The formulation of characterological findings.) *Beih. Z. angew. Psychol.*, 1936, No. 72, 115-139.—The application to everyday life of psychological findings, particularly as obtained through analysis, is discussed. Individual differences, their synthesis, and interpretation in the light of the whole personality and its environmental milieu are considered, with emphasis upon the fact that these interpretations (as based upon analysis) should be (1) correct, i.e. the various facts arrived at should fit together to form the composite personality, and (2) interpretable and applicable to the daily situations, which demands a consideration of the subject's attitudes, his abilities in the light of his aims and ambitions, etc.—*G. F. J. Lehner* (Brown).

351. *Weininger, O. Sex and character.* New York: Burt, n.d. Pp. 378. \$1.00.—*R. R. Willoughby* (Brown).

[See also abstracts 223, 240, 250, 360, 407, 424, 450, 470, 475, 507, 526, 528.]

#### GENERAL SOCIAL PROCESSES (incl. Esthetics)

352. *Bryan, A. I., & Wilke, W. H. A scale for measuring speaking ability.* *Psychol. Bull.*, 1936, 33, 605-606.—Abstract.—*R. H. Brown* (Yankton).

353. *Campbell, C. A. Are there degrees of the moral emotion?* *Mind*, 1936, 54, 492-497.—"There seems to be good reason for holding that the moral emotion cannot vary intensively at all, that it is quantitatively as well as qualitatively a constant." The author argues for this view.—*H. Helson* (Bryn Mawr).

354. *Coetsee, J. C. Die Godsvoorstelling van 'n groep skoolkinders.* (The ideas of God of a group of school children.) *Ned. Tijdschr. Psychol.*, 1936, 4, 50-68.—An elaborate tabulation of the results of tests of school children as to their grasp of fundamental ideas of God, Christ and Holy Ghost, and their traditional attributes.—*O. N. de Weerd* (Beloit).

355. *Costa, D. Das rassenkundliche Schrifttum des Jahres 1935.* (Racial science publications of 1935.) *Fortschr. Neurol. Psychiat.*, 1936, 8, 421-436.—The author states that the past year has brought forth many more scientific studies of race and fewer lay articles on the subject. The scientific studies

which he reviews in this article are classified as biological, medical, geographical, historical and applied racial science. Under biology, ecology, environment, medicine and hygiene are discussed; the medical section deals with constitutional types, etc. Geographical racial science includes comparative studies. Newspaper articles of interest are also mentioned in a special section at the end of each part.—*D. S. Oberlin* (Delaware State Hospital).

356. *Dodge, E. G. The audibility of Esperanto.* *Science*, 1936, 84, 352.—The author, after referring to an article, *The Audibility of Language*, which appeared in *Science* June 12, 1936, states that Esperanto more than English appears to conform to the audibility requirements which were discussed in that article. He calls attention to the fact that nasal *ng* does not appear in Esperanto, that more words end in vowels than in English, and that Esperanto has a group of four explosives which he believes make it easily audible.—*F. A. Mote, Jr.* (Brown).

357. *Doob, L. W. Variability and culture.* *Psychol. Monogr.*, 1936, 47, 374-380.—The author starts with the premise that "psychologists do not appreciate the significance of culture." If they did, "the present course of psychology might be quite different. Psychology then could have a changed perspective concerning the following vital issues: The training of psychologists, the methodology of the discipline, and the social relevance and application of results." These three issues are discussed separately. Under such an approach, "the graduate schools would pay more attention to the demands which American society wittingly or unwittingly makes of the profession. Students would be taught the art of dealing with people and of appraising them." How the psychologist may "reconcile his own findings with the realities of society" is discussed with reference to individual variability, which contains the factors making for cultural change. Finally it is briefly indicated how the psychologist "may reformulate realistically his own scientific goal" to accord with culture.—*K. F. Muenzinger* (Colorado).

358. *Fernald, G. M., & Keller, H. B. On certain language disabilities—their nature and treatment.* *Ment. Meas. Monogr.*, 1936, No. 11. Pp. 121.—The authors describe the characteristics and reactions during retraining by the hand-kinesthetic method of both children and adults with total disability and partial disability in reading, spelling, and foreign languages. The method employed consisted of writing the word with a crayola on paper and allowing the subject to trace it with his finger and say it orally at the same time. This procedure continued until the subject was able to write the word without copy. Later, tracing was not necessary, for the subject learned to write the word without tracing it. This procedure led to normal reading. For 26 cases of total disability in reading the subjects progressed 3.8 grades in 6.9 months. For 14 cases of partial disability the progress was 2.4 grades in 6.2 months. The authors produce evidence that 80 to 100% of the words written are permanently retained. 9 cases of adults of superior intelligence profited significantly

by the same method of training. For several cases who were failing in foreign languages the efficacy of the hand-kinesthetic method in retraining is also described. Theoretical discussion of the theories and explanations of reading disabilities and an extensive bibliography are also included.—S. A. Kirk (Milwaukee State Teachers College).

359. Findley, W. G. Factor analysis of a short-item drawing test. *Psychol. Bull.*, 1936, 33, 605.—Abstract.—R. H. Brown (Yankton).

360. Fischer, F. H. Het symbool in de kultuur-geschiedenis. (The use of symbols in the history of culture.) *Ned. Tijdschr. Psychol.*, 1936, 4, 77-84.—The essential world in which humans live is the world of ideas growing out of experience, learning, and training, which in turn form the bases for the interpretation, even the recognition of facts. Individual differences occur in experiences and hence in attitudes within the framework of a culture, in politics, art, etc. Three basic impulses furnish the motive power in any mental or cultural life: (1) the drive to expression (not the same as the direct drive to action—expression is found in fantasy as well as objectively); (2) ethical judgments of ought (or should) vs. must; (3) esthetic judgments. Social standards of a culture find symbolic or indirect expression in the three avenues. Symbolism is necessary, since direct recognition of such facts as class distinctions devitalizes the drive to uphold them. Thus elaborate headdress for the woman in a protected home and bobbed hair for the woman competing with men in a man-controlled world are symbolic of social attitudes. Similarly the long trousers adopted by men in the first quarter of the nineteenth century are the symbolic expression of a new-felt democracy.—O. N. de Weerdt (Beloit).

361. Frenkel, E. Studies in biographical psychology. *Character & Pers.*, 1936, 5, 1-34.—The phases and regularity of psychological development are discussed. Data were collected on the individual's external events (practical, social, recreational), internal reactions (values), and accomplishments (inventions, operas, novels, etc.). The point at which activity is at a maximum is dependent upon the nature of the activity. Greater success in athletics is achieved by younger people, but in work which requires endurance, independent thought and responsibility older individuals excel. From the standpoint of evaluation, the younger individual's experience is determined by needs, while for the older person it is determined by duties and obligations. On the side of production, there are various kinds of success: public, monetary, official, success as judged by experts, and success in the producer's own estimation. Generally, little display of success at first followed by a gradual rise goes hand in hand with greater and more lasting success. The life course varies with the vocation. Artists require the least time for study but the greatest amount for planning and preparation. Scientists require a long period for study but enjoy a long period of productivity. Men of action require the longest period of vocational study. The method described may be of value in

developing a prophylaxis for weariness and suicide, the prediction of the productive period, life span and "ripeness" for retirement.—M. O. Wilson (Oklahoma).

362. Gerberich, J. R., & Thalheimer, J. A. Reader interests in various types of newspaper content. *J. appl. Psychol.*, 1936, 20, 471-480.—A questionnaire was submitted to college students and adults on newspaper interests in certain sections of paper and in types of news stories. General news, comics, editorials and sports rank high in interest, while serial stories and art rank low. The news stories most preferred are travel and human interest. These are followed in descending order of preference by self-improvement, sports, politics, photographs, war, and education. The correlation in newspaper reading interests ranges between .50 to .90 for the various groups used in this study, although they differed in age and economic status. Correlations of interest between men and women range from .17 to .54.—R. S. Schultz (Psychological Corporation).

363. Green, J. S. The stutter-type personality and stuttering. *N. Y. St. J. Med.*, 1936, 36, 757-765.—R. R. Willoughby (Brown).

364. Hara, K. Psychological studies of leader of youth. II. An ideal leader preferred by young men and women. *Jap. J. exp. Psychol.*, 1936, 3, 97-111.—Merits regarded essential to leaders of youth by young men and women are in terms of preference as follows: mental culture is highest both in men and women, training in business and military drill (men) or domestic sciences, sewing and knitting (women) come next, and superiority in gymnastics and sports is lowest. As to personality of leaders sense of responsibility stands first, then come sympathy and kindness, research work, and ability to guide. Leaders' age preferred differs according to sex, ranging on the average from 20 to 45. English summary.—R. Kuroda (Keijo).

365. Hellwig, A. Fälle von Hexenglauben aus neuester Zeit. (Contemporary cases of belief in witchcraft.) *Arch. Kriminol.*, 1936, 99, 54-64.—The cases cited show that belief in witchcraft is still very much alive among the Mecklenburg peasantry, although it seldom comes to the attention of the police. Hellwig emphasizes that occultism is based on belief in the same forces as witchcraft.—M. E. Morse (Baltimore).

366. Hisata, T. [Studies on friend-groups: their structure and character.] *Jap. J. exp. Psychol.*, 1936, 3, 113-133.—The paper deals with the psychosociological structure of friend-groups and several conditions determining them. A discussion of the structure of friend-groups in which residence and intelligence are taken into consideration is followed by notes on the characters of their members and the meaning of intimacy of friendship. Data concerned come from children of primary and secondary schools.—R. Kuroda (Keijo).

367. Jacobsen, O. I. Dynamic and temporal control in music. *J. gen. Psychol.*, 1936, 15, 171-190.—In studying dynamic control, two tests were devised. In a test for "capacity" the subjects were asked to match a standard intensity by moving a rider on

a non-musical instrument. In the test for "achievement" a number of specific tasks were performed on musical instruments and the intensity was measured by electrical means. Comparable tests were used to measure temporal control. Data are reported from 55 subjects of various types, and from 73 members of a university symphonic orchestra. Sensory and motor capacity in the same musical factor do not seem to be intimately related.—*H. Schlosberg* (Brown).

368. **Kesselring, M.** *Völkische Psychologie und Jugendkunde im Umriss.* (An outline of folk psychology and the science of youth.) *Z. pädag. Psychol.*, 1936, 37, 341-361.—A mystical interpretation of German folk psychology. It is not intellectual but realistic; rejects scientific impartiality, although the methods of "so-called general psychology" are necessary to it, and the task of German psychology is to direct it to the sacred service of the Third Reich. It is a new creation, conscious of its political mission; superindividual; suprarational; maternal; eternal; giving to earthly life its meaning, direction and nobility. Its characteristics are the physiognomonic and magical attitudes, fairy tales, myths, associative thought, and oneness with nature. The new task for educational psychology is the formation of a psychology for the child and adolescent initiate into the folk and national life. This includes the psychology of militarism, defense, leadership, and national heroes; the peculiar psychology of the German; symbols; rituals; songs; holy places; myths; stimulation of the magic consciousness; German sex psychology; the peasant's and worker's soul, etc.—*M. E. Morse* (Baltimore).

369. **Knott, J. R.** *A study of stutterers' stuttering and non-stuttering experience on the basis of pleasantness and unpleasantness.* *Quart. J. Speech*, 1936, 22, 328-331.—With the use of an 11-point affective rating scale, 28 stutterers evaluated the relative P or U of the most pleasant and most unpleasant experiences they ever had, and the most pleasant and most unpleasant experience in the last 24 hours. A brief description of the situation was requested. One week later the subjects attempted to recall these experiences and to re-rate them on the scale. A month later, the subjects rated, on the scale, the most pleasant and most unpleasant speaking experiences ever had. Analysis of the data showed that stuttering experiences were neither more nor less pleasant than non-stuttering experiences. Speaking situations (not necessarily marked by stuttering) were neither more nor less pleasant than non-speaking experiences. Stutterers tended to recall stuttering experiences better than they did non-stuttering experiences. There were 97 chances out of 100 that this tendency represented a true difference greater than zero.—*B. Wellman* (Iowa).

370. **Maslow, A. H.** *Dominance hierarchies in pairs and in groups of macacus rhesus monkeys.* *Psychol. Bull.*, 1936, 33, 601.—Abstract.—*R. H. Brown* (Yankton).

371. **Meier, N. C.** *Art ability without instruction or environmental background: case study of Loran Lockhart.* *Psychol. Monogr.*, 1936, 48, No. 213,

155-163.—A case study of a boy, 7 years old, who had been blind since birth and was given a fair degree of vision through surgical operations. The boy showed an unusual artistic ability as regards both composition and the use of colors. He had not received any instruction, nor does it seem likely that his environment could have exerted any influence to account for the quality of his drawings. Two probable explanations for the appearance of this artistic ability without the usual bases are suggested: inheritance and the possibility that "his view through his newly discovered sense of sight provides him with fresh and extremely vivid impressions, which through his superior intelligence he is able to express on paper in a normal or even superior manner."—*K. F. Muensinger* (Colorado).

372. **Meier, N. C., & McCloy, W.** *An instrument for the study of creative artistic intelligence.* *Psychol. Monogr.*, 1936, 48, No. 213, 164-172.—The apparatus here described consists of a miniature stage upon which one can place certain basic forms, plastaline clay models, for instance, which may then be lighted up by a great variety of colors. The variations in composition, background, lighting, and coloring made possible by the device seem almost unlimited. One color plate.—*K. F. Muensinger* (Colorado).

373. **Menefee, S. C.** *The effects of stereotyped words on the formation of political opinions.* *Psychol. Bull.*, 1936, 33, 622.—Abstract.—*R. H. Brown* (Yankton).

374. **Mills, L.** *Peripheral vision in art.* *Arch. Ophthal.*, Chicago, 1936, 16, 208-219.—Only sporadically in the history of art have paintings represented a proper relationship between the area of clear central vision and the subordinate areas of peripheral vision. Where such a relationship is exhibited, as frequently in Rembrandt's work, an effect of depth is attained without resort to artifice, and such pictures have usually been regarded as truly great. Effects dependent on peripheral vision were usually not represented until the advent of impressionism, when the details associated with clear central vision were rejected in favor of impressions received peripherally. This emphasis may be partly explained by the high incidence of myopia among artists of the impressionist school, many of whom always saw distant forms distorted, as they are seen peripherally by those with normal vision. The distortions of El Greco's figures are not to be explained in this way, but are apparently deliberate, while Gordon Craig's stage effects were probably inspired by his myopic perceptions.—*M. R. Stoll* (Mass. Eye & Ear Infirmary).

375. **Mühlmann, W. E.** *Das Begabungsproblem bei den Naturvölkern.* (The problem of ability in primitive peoples.) *Z. Rassenk.*, 1936, 4, 88-90.—Pointing out the necessity for a common basis of comparison if interracial abilities are to be considered as quantitative differences, the author discusses factors inhibiting intelligence in primitive peoples. These are: (1) struggle for existence, (2) absence of an intellectual class who devote their

time to the advancement of knowledge, (3) a short life span, with consequent lack of intellectual maturity, (5) lack of language development, (6) lack of objective documentation by which results of experience could be preserved and by which others could profit, and (7) the limited possibilities of reaction in comparatively simple surroundings. Conclusions follow that differential racial abilities are not quantitatively explainable, and that, moreover, the genetic approach (now over-emphasized) has serious limitations. There is no person without his surroundings. There exists only a social and historical person; likewise with the race.—G. F. J. Lehner (Brown).

376. Obrdlik, A. Social attitudes of the Czechoslovakian peasant toward the other occupational groups. *Rur. Sociol.*, 1936, 1, 296-305.—Over a thousand citizens were questioned concerning the relative "importance in promoting the general welfare" of the artisan, priest, politician, teacher, peasant, worker, engineer, physician, soldier, artist, merchant, lawyer, and industrialist. All groups rated the peasant as most important. The priest and the lawyer were thought to be least important.—P. R. Farnsworth (Stanford).

377. Olson, E. Trends in social therapy. *Amer. J. Orthopsychiat.*, 1936, 6, 416-420.—Treatment of a case by a social worker in a family agency is presented to show a trend in social treatment.—J. McV. Hunt (Brown).

378. Olyanova, N. Handwriting tells. New York: Covici, Friede, 1936. Pp. 216. \$2.50.—R. R. Willoughby (Brown).

379. Patkin, A. Law as a psychological phenomenon. L. Petrajitzky's theory of law and morals. II. *Aust. J. Psychol. Phil.*, 1936, 14, 191-209.—As an emotional experience, law involves the "attributive" psychological phenomenon of right, which a moral experience does not include. Regarded in its true light, law evidently signifies something more than and different from institutional legal codes. Legal emotions as well as moral imperatives should be transmitted to children, since they are important determinants of behavior. While Petrajitzky's analysis of the psychological nature of law is on the right track, it is nevertheless too restricted to non-social situations, and should be amplified by social psychology.—H. D. Spoerl (American International College).

380. Roberts, H. L. Integrating and disintegrating effects of sound stimuli. *Psychol. Monogr.*, 1936, 47, 401-407.—A number of examples from primitive society are discussed which illustrate the integrating effect of music. Reference is made to the disintegrating effect of noises in our modern way of living. "Psychologists and psychiatrists have a very real and pressing problem in the way of investigating and reporting on both the integrating and the disintegrating effects of noise and music stimuli. . . . In the present careless control and constantly augmenting volume of sound in our life doubtless lies one explanation of the growing emotional instability and even criminal outbreaks in modern society."—K. F. Muenzinger (Colorado).

381. Ross, V. R. Musical talents of Indian and Japanese children. *J. juv. Res.*, 1936, 20, 95-113.—The Seashore test of musical ability was administered to 428 Indian children distributed between the 6th, 8th, 9th, 11th, and 12th grades. In general, the performance of the Indian children fell significantly below that represented by the white norms. The minus deviation of the Indians tended to be least in the case of the rhythm and time tests, and greatest in the case of the tests of pitch, tonal memory, intensity, and consonance. The performance of 337 Japanese children distributed from the 5th through the 12th grade in the Los Angeles public schools compared favorably at all grade levels with that of the whites. In tonal memory and pitch the Japanese scored slightly but rather consistently below the white norms, while in the time test they scored slightly but consistently above.—H. L. Koch (Chicago).

382. Rubenovitch, P. La notion d'évolution et les rapports de la mentalité primitive avec la psychopathologie. (The idea of evolution and the relationship between primitive mentality and psychopathology.) *Evolut. psychiat.*, 1935, No. 2, 77-95.—M. H. Piéron (Sorbonne).

383. Saunders, A. W. The stability of artistic aptitude at the childhood level. *Psychol. Monogr.*, 1936, 48, No. 213, 126-153.—Can artistic aptitude be altered by intensive training? 10 artistically inferior and 4 superior children were "stimulated during two school years by a special program of instruction including free expression and motivation." The control group consisted of children of the same grade level. The results show "that a radical change in level of art ability is possible under especially favorable conditions. . . . The amount of gain made was, to some degree, in direct relation to the amount (time) of stimulation received, and to the degree of inferiority at the start." The removable causes of artistic inferiority include unfavorable home conditions, use of improper material, lack of motivation, and lack of sensitivity to elements of artistic quality. 64 references.—K. F. Muenzinger (Colorado).

384. Schönauer, S. Ricerche sperimentali sugli effetti fisio-psicologici della musica. (Experimental research on the physiopsychological effects of music.) *Osped. Psychiat.*, 1935, 3, 841-900.—After a discussion of the large literature on this material, the author studies the methods and the results of research and observation on the physiological and psychological influence of music. He reports in detail the procedure of his own experiments, from which he concludes that music can arouse sphygmographic, pneumographic, and psychic reactions which can be clearly differentiated and reproduced and which vary in a constant relation with several individual musical factors. The author intends to study the effects of music in nervous and mental disease.—G. M. Hirsch (Rome).

385. Schubert, H. J. P. Twenty thousand transients: a one year's sample of those who apply for aid in a northern city. Buffalo: Emergency Relief Bureau, 1935. Pp. x + 150.—Brief historical background and definitions of "a transient" are given.

The author, using a population of 16,783 destitute male travelers, answers the following questions: (1) when do they wander, (2) what is their race and age, (3) whence do they come, (4) how do they travel, (5) how long have they been on the road, (6) why are they wandering, (7) how long do they stay, (8) have they applied at other centers, (9) how long have they been unemployed, (10) what pursuits have they followed, (11) what schooling have they had, (12) are they ailing, and (13) what is their general social background. The author answers many of the same questions for a population of some 2000 seamen, the heads of 225 wandering families, and 35 women transients. Sections are devoted (1) to the development and personnel of a city office work project using, at its height, 170 men per day and (2) to the characteristics of a camp population of 221. "Very tersely, they (the unattached men) are young factory hands roaming more or less aimlessly in search of work, having been fed up with idleness at home." They come from cities within a 500-mile radius. Half of them are less than 30 years of age. Most are not interested in what formal school has to offer, are slightly below average in academic ability, have had very little more than elementary schooling, are largely unskilled or semi-skilled workers, and are in surprisingly good health. A small percentage, but a substantial absolute number, are of superior ability (about 1600 were estimated to be capable of professional training). The seamen are middle-aged as a group, are academically less apt and have had less schooling than the landsmen, and are well organized. Family heads were very similar to the unattached landsmen, though somewhat older. The families usually wandered because of loss of residence. Lone women wanderers are more able than similar men though definitely less stable. Camp residence appeals to those over 45. Those who stopped there responded well to camp life. Workers on an office project necessarily were from the abler and younger transients. A good response to the situation of this vital real (vs. "made") work was obtained. As a general preventive measure to stop transiency, work programs and good school and recreational facilities in the home communities are urged. As a remedial procedure to prevent further wandering, work programs with more than subsistence care in the city shelters are strongly suggested.—*M. E. Wagner* (Buffalo).

386. Seemann, M. *Prispevek k pathogenezi kóktavosti*. (Contribution to the pathogenesis of stuttering.) *Rev. Neurol. Psychiat., Praha*, 1936, 33, 399-404.—Slovak, working in the author's clinic, found an abnormal composition of the blood and humors (dyscrasia) in 88.4% of 155 child stutterers and in 84.6% of 145 adult stutterers. The lability of the vegetative nervous system, which is partly primary and partly secondary, is a favorable condition for the genesis of stuttering. The author supposes that the striopallidal system plays an important role in the hyperkinesis and synkinesis of the stutterers' paroxysms. The dynamic changes in this system are caused by mental influences of reflex-like character. The above studies draw attention to the psychophysical constitution of the stutterers and confirm

the neurotic nature of stuttering.—*Z. Piotrowski* (Columbia).

387. Sesini, U. *Linguaggio musicale, magia, liturgia*. (Musical language, magic, liturgy.) *Riv. Psicol. norm. pat.*, 1936, 32, 91-106.—The author discusses the possible physical and physiological bases of music as a means of expression and communication, and considers the various applications man has made of a musical language in magic and in religion.—*T. M. Abel* (Trade Extension Classes, N. Y. C.).

388. Shankweiler, P. W. *A sociological study of the child welfare program of Worcester, Massachusetts*. *Bgham-South. Coll. Bull.*, 1936, November. Pp. 22.—This is a "study by statistical and case study and survey methods of the social adequacy of the welfare organizations for handicapped children in a Massachusetts city typical of northeastern industrial centers in its preponderantly foreign population and sharply contrasting cultural patterns." As a background for the study Worcester is compared with other large cities in the state in regard to standards of living and general welfare conditions. The community's child helping organizations are analyzed and evaluated and their program considered according to the four types of children dealt with: the dependent, delinquent, defective and normal. The author draws the conclusion that greater attention should be directed toward removing the underlying causes of child need in Worcester—"low living standards, unassimilated immigrant groups, parental ignorance and inadequate educational and recreational facilities."—*H. Fairbanks* (Worcester, Mass.).

389. Sloane, P. *The use of a consultation method in case work therapy*. *Amer. J. Orthopsychiat.*, 1936, 6, 355-362.—*J. McV. Hunt* (Brown).

390. Spendiaroff, E. *On the visual versus the auditory element in learning to read a foreign language*. *Mod. Lang. J.*, 1936, 20, 403-406.—Report of a personal introspective experiment in learning to read Italian. After discussing the psychological implications of the various phases of language learning, the author concludes that "mature reading habits in a foreign language are furthered by perceptual ability in so far as the latter has been in turn developed by a solid aural-oral training."—*D. D. Feder* (Iowa).

391. Tiebout, C. *The measurement of quality in children's painting by the scale method*. *Psychol. Monogr.*, 1936, 48, No. 213, 85-94.—The plan of this study was to devise a series of scales for the measurement of the artistic quality of children's paintings. In the construction of the scales 100 children from each of the first seven grades were used. Three paintings were made by each child, illustrating certain stories selected from a prepared list. Two groups of judges ranked the paintings, of which the most typical ones were incorporated in the scales. The reliability of the judgments was found to be very high.—*K. F. Muenzinger* (Colorado).

392. Tiebout, C., & Meier, N. C. *Artistic ability and general intelligence*. *Psychol. Monogr.*, 1936, 48, No. 213, 95-125.—"This study was devised to

determine the relationship of general intelligence to artistic ability, both in the degree to which it is present in the child population and as it is manifest in superior performance at the high school level and in genuine achievement in the artist." For the first phase of the study 100 children from each of the first seven grades were used as subjects. For the second phase two selected groups were used. The first of these consisted of 72 junior and senior high school students who had been rated as artistically superior. The second was composed of 51 artists of recognized achievement. The study with the grade school children yielded the conclusion that "artistic ability is a special ability in the sense of being only somewhat related to general intelligence as measured by established tests." As regards the artistically superior individuals it was found that both groups had superior intelligence as indicated by their average IQ's. "It appears that the use of artistic potentialities in the achievement of marked success in art is dependent to a certain extent on intellectual capacity." 39 references.—K. F. Muenzinger (Colorado).

393. Travis, L. E. A point of view in speech correction. *Quart. J. Speech*, 1936, 22, 57-61.—"In the diagnosis and treatment of a person with a speech defect, as in the diagnosis and treatment of all the difficulties the person has, one must be aware of the two fundamental principles: that of individual variation, and that of individual unity. Hence, it is most essential to consider a speech defect as a deviation of the whole person, a deviation that presents a certain uniqueness in each case and that in each case calls for individual diagnosis and management."—B. Wellman (Iowa).

394. Voss, M. D. A study of conditions affecting the functioning of the art appreciation process at the child level. *Psychol. Monogr.*, 1936, 48, No. 213, 1-39.—The purpose of the investigation was to study the effects of direction or set as to the criteria of art, and of practice in the perception of manifestations of these criteria. The subjects were two matched groups of children from the second to the fifth grade. As long as the members of the experimental group merely judged the relative merits of paired exercises, one of which exemplified while the other violated a principle of art, they did not improve significantly as compared with the control group. Significant differences in favor of the experimental group did occur, however, when its members were instructed to note or abstract the principles of art manifested in the exercises. Among various conclusions the author states that "the principles of art can be explained in such a manner that they can be understood and applied by children in the second, third, fourth, and fifth grades." While esthetic judgment is increased, "comprehension of the picture as a substitute-object" decreases.—K. F. Muenzinger (Colorado).

395. Voss, M. D. The validity and reliability of a modified form of the McAdory art test for use at lower grade levels. *Psychol. Monogr.*, 1936, 48, No. 213, 68-84.—The McAdory art test is standardized for children above the third grade. An

attempt was made "to determine whether the standardized form or a modified form of this test might be suitable for use in the second and third grades." The subjects used in the study were the pupils in the second, third, fourth, and fifth grades of two Iowa towns. Both reliability and validity of the test were determined under various conditions. The results seem "to justify the conclusion that extension of the McAdory art test to lower grade levels in a modified form has not impaired the validity of the test."—K. F. Muenzinger (Colorado).

[See also abstracts 24, 80, 143, 190, 206, 220, 242, 274, 285, 298, 321, 333, 346, 347, 416, 451, 457, 505, 508, 515, 529.]

## CRIME AND DELINQUENCY

396. Ackerson, L. On evaluating the relative importance or "seriousness" of various behavior problems in children. *J. juv. Res.*, 1936, 20, 114-123.—The author attempted to estimate the "seriousness" of 150 traits and types of case-record notation by correlating each of these with each of three criteria: police record, personality-item total (count of all unfavorable personality traits mentioned in the record) and conduct-item total (count of all unfavorable conduct items appearing in the case notations). The subjects were 2113 white boys and 1101 white girls dealt with by the Institute of Juvenile Research in Chicago. Among the items correlating highest with the personality criterion were the following: diagnosis or suspicion of dementia praecox, queerness, depressed manner, contrariness, personality change, hatred of sibs, inferiority attitude, and sensitiveness. Correlating highest with the conduct total were: bad language, psychopathic personality, destructiveness, truancy from home, disobedience, and stealing. Among those items showing the highest relation with police record were: truancy from home, stealing, bad companions, associating with a gang, and (for girls) coitus. The three criteria correlated negligibly with IQ.—H. L. Koch (Chicago).

397. Antonini, G. Osservazioni sugli accolti nell'assistenzario per i liberati dal carcere di Milano. Comunicazione fatta al convegno della Società di Antropologia e Psicologia Criminale, a Milano, Maggio 1935. (Observations on persons received by the bureau for the aid of released prisoners in Milan. Communication to the congress of the Society of Anthropology and Criminal Psychology at Milan, in May 1935.) *Rass. ital. Psichiat.*, 1935, 24, 1066-1073.—The author concludes that the bureau for the aid of released prisoners is one of the best methods of re-educating criminals, or at least of rendering them less dangerous and utilizing them socially. The treatment must always be based on a knowledge of the individual personality and on well-organized social work.—G. M. Hirsch (Rome).

398. Barretto, C. X. P. O crime, o criminoso e a pena. (The crime, the criminal and the punishment.) Rio de Janeiro: Coelho Branco, 1934. Pp. 254.—This book treats of the relation of penology to other

legal disciplines, theories and schools of penology, psychoanalysis, endocrinology, etc.—*M. E. Morse* (Baltimore).

399. Berk, A., Lane, L., & Tandy, M. C. A follow-up study of thirty habit clinic children who manifested delinquency problems before age of ten years. *Bull. Mass. Dept. ment. Dis.*, 1936, 19, 37-57.—*R. R. Willoughby* (Brown).

400. Charles, C. M. A comparison of the intelligence quotients of incarcerated delinquent white and American negro boys and of groups of St. Louis public school boys. *J. appl. Psychol.*, 1936, 20, 499-510.—On the Kuhlmann-Anderson intelligence test public school boys in St. Louis between the ages of 12 and 16 are superior to boys of the same age in reform schools.—*R. S. Schultz* (Psychological Corporation).

401. Di Tullio, B. Errori e pregiudizi in antropologia criminale. Costituzionalismo e psicologia. (Errors and prejudices in criminal anthropology. Constitutionalism and psychology.) *Riv. Diritto Proced. pen.*, 1936, 7, 205-228.—The author concludes from recent critical studies of well-known scholars that large errors and prejudices are shown on such topics as the organic determination of criminality, atavism, specific morphological stigmata of the delinquent, pathology, etc. He clarifies the exact scientific and practical value of the doctrine of delinquent constitution. He states that the psychological study of the delinquent and of crime is being made by criminal anthropology, the purpose of which is a morpho-physio-psychical and biographical complete study of the delinquent to determine the causes and remedies of criminality.—*G. M. Hirsch* (Rome).

402. Gemelli, A. Le applicazioni della psicologia differenziale allo studio della delinquenza. (The applications of differential psychology to the study of criminality.) *Riv. Diritto Proced. pen.*, 1935, 6.—The author observes that criminal anthropology and sociology do not reach the dynamics of the criminal action, which should be studied rather than the criminal himself. The study of character, endocrinological, constitutional, or biotypical, and of psychoanalysis do not make clear the genesis of crime. Nor is the doctrine of heredity of value, due to the crossing-over factors which modify the laws of heredity, the phenomena of pseudo-heredity, and the plasticity of human character. As indicated by De Sanctis, the psychology of normal man should include the study of criminality, investigating the influence of ideals, instincts, emotion, and other problems. Excluding cases of organic criminogenesis, or those caused by insanity, neuropathy, or excessive variability of the normal, the author indicates some principal categories of criminals which must be studied by psychology if an improvement in the knowledge of criminality and a positive basis for the prevention of crimes and re-education of criminals is to be obtained.—*G. M. Hirsch* (Rome).

403. Glueck, S., & Glueck, E. Preventing crime. A symposium. New York: McGraw-Hill, 1936. Pp. 509. \$4.00.—A description of some of the most promising and representative crime-prevention experi-

ments, written by the people who are directing these projects. The work is divided into six parts, according to the type of program which is used in dealing with crime prevention. These are: co-ordinated community programs, school programs, police programs, intramural guidance programs, extramural guidance programs and boys' clubs and recreation programs. The volume is introduced by a chapter on the philosophy and principles of crime prevention, which was written by the authors. In addition to their general philosophy of crime, they summarize some of the principles of crime prevention which are illustrated by the various chapters in the book. Biographies of the authors of the various chapters of the book are given.—*F. J. Gaudet* (Newark).

404. Haškovec, L., Jr. K psychologii svedka pred soudem. (On the psychology of the witness in court.) *Rev. Neurol. Psychiat., Praha*, 1936, 33, 296-299.—Judges should have some psychological and psychiatric education in order to be able to estimate more reliably the value of testimony of witnesses and thus make fewer mistakes in passing sentences.—*Z. Piotrowski* (Columbia).

405. Kelly, P. B. [Ed.] Announcement of the Institute of Criminal Science. Washington: Inst. Crim. Sci., 1936. Pp. 16.—The Institute of Criminal Science is a coeducational foundation providing courses of study and research equipment necessary to give its students training and research in fields bearing on the problem of crime, to correlate and coordinate the work of divergent fields in criminology, and to gather, coordinate and spread the knowledge in every field which contributes to criminology.—*F. A. Mote, Jr.* (Brown).

406. Langfeldt, G. Der Dieb und der Einbrecher. (The thief and the burglar.) Oslo: J. Dybwad, 1936. Pp. 109. RM. 7.—This is a study of 50 Norwegian prisoners concerning the etiology of criminality. The technique employed is that of free description and detailed case histories. Important causative factors are listed: hereditary mind and body pathologies, personality, and to a slighter extent, intelligence defects, chronic alcoholism, and inferior home and other environmental conditions and training in early life. Recommendations are made as to how society might most expeditiously cope with each type of criminal behavior.—*H. A. Kohn* (Mooseheart Laboratory for Child Research).

407. Michaels, J. J., & Schilling, M. E. An attempt to determine the degree of antisocial behavior in psychopathic personalities and its correlation with the Porteus maze and Binet-Simon tests. *Amer. J. Orthopsychiat.*, 1936, 6, 397-405.—The degree or extent of antisocial behavior was quantified by rating the various acts for seriousness. The ratings compared favorably with legal judgments. No significant correlations were found between these ratings and the mental ages or the IQ's of the Porteus maze and Binet-Simon tests.—*J. McV. Hunt* (Brown).

408. Myslivecek, Z. Trestni zodpovednost progresivnich paralytiku. (Responsibility of progressive paralytics for crimes.) *Rev. Neurol. Psychiat., Praha*, 1936, 33, 387-398.—In forensic psychiatry

it is a thorough analysis of the personality structure and the factors affecting it rather than a phenomenological analysis of the symptoms which is important. The seriousness of symptoms is not always correlated with the seriousness of unfavorable personality changes. The author believes that general paralytics with a positive reaction of the spinal fluid cannot be held responsible for their crimes even when there are no visible pathological changes in their general behavior. There are cases of paralytics who let themselves be sentenced to prison for crimes they have not committed. Lack of legal responsibility is indicated particularly when the crime has been committed at the age of 40 or later in the absence of any previous criminal history. The author suggests that all who commit their first crime at a mature age be examined neuropsychiatrically. The criminal action is frequently the first sign of mental impairment. Even in periods of remission the mental ability is diminished. The author gives four case histories illustrating his points.—Z. Piotrowski (Columbia).

409. Selling, L. S. A new profession: psychiatric criminology. *Amer. J. Orthopsychiat.*, 1936, 6, 437-439.—A psychiatrist trained in the study of behavior can make a larger contribution to the criminal court than merely distinguishing between the lunatic and the "responsible" person. Yet, from the standpoint of technique, the task of the criminological psychiatrist is different from that of the psychiatrist in the mental hospital or the mental hygiene clinic, for the criminal feels it safest to cooperate as little as possible, whereas the patient comes voluntarily or is brought by relatives for treatment. The writer protests that psychiatrists in criminology should clarify this point of difference for the legal profession, and he urges that training agencies for criminological psychiatrists and psychologists be established.—J. McV. Hunt (Brown).

410. Simon, T. Trois cents cas de délinquance juvénile. Essai de psychologie et de conclusions d'ordre pratique. (Three hundred cases of juvenile delinquency. Psychological analysis and practical conclusions.) *Bull. Soc. A. Binet*, 1935, No. 312-313, 118-142.—Medical and psychological examinations, frequency of various physical diseases and of mental disorder, mental defect, and laziness are considered. The role of sports in improving the personality and preventing crime is discussed.—H. E. Burtt (Ohio State).

411. Solano, S. Lo stato pericoloso e alcune sue forme cliniche. (The dangerous state and certain of its clinical forms.) *Arch. Antrop. crim.*, 1936, 56, 437-464.—The development in the past fifty years of the concept of the individual delinquent as a social menace, criminal or otherwise, with its concurrent attention to the offender rather than the offense, and the effort to frame laws for the protection both of society and of the unsocialized individual, is discussed with special reference to Italy, Spain, and Latin America. A broad summary is given of current practice in these and other countries in dealing with prostitution, homosexuality, drug addiction, alcoholism, and vagrancy: How is the individual diag-

nosed as a menace? What legal action is taken? What ameliorative measures are undertaken?—C. J. Her-  
rick (Pennsylvania).

412. Strüder, —. Eigentumsverbrecher aus gesteigerter Sexualität. (Crimes against property due to hypersexuality.) *Krim. Mh.*, 1936, 10, 197-199.—Strüder narrates four cases of oversexed persons whose predominant motive for theft and swindling was to get the means to impress and hold their partners, the attitudes being inferiority and dependence. Voluntary castration in this type of case is advisable before resorting to preventive custody, and a study of the results would contribute to the question of the extension of compulsory castration for criminals.—M. E. Morse (Baltimore).

413. Trendtel, —. Zur Frage des "homosexuellen Rauschzustandes." (The question of homosexual twilight states.) *Arch. Kriminol.*, 1936, 99, 44-53.—Trendtel relates three murder cases in which this defense was made. He considers that a pathological disturbance of consciousness arising from the sexual sphere can be assumed only when an organic brain disease is present.—M. E. Morse (Baltimore).

[See also abstracts 211, 281, 312, 333, 346, 379, 418, 434, 501, 532.]

## INDUSTRIAL AND PERSONNEL PROBLEMS

414. Ackermann, A. Die wissenschaftlichen Grundlagen der Psychotechnik. (The scientific foundations of psychotechnics.) *Psychotechnik*, 1935, 1, 11-25.—The author describes the principal methods used by psychotechnicians and some less generally employed, such as handwriting, case history, early memories, ideals, behavior during examination. Numerous fundamental principles are outlined.—H. E. Burtt (Ohio State).

415. [Anon.] La durée du travail et des repos des conducteurs de véhicules automobiles. (Duration of work and rest for automobile drivers.) *Rev. int. Trav.*, 1935, 32, 777-796.—Working time is often limited by the week rather than by the day. From the fatigue standpoint, particularly in driving automobiles, the daily program should be subject to temporal limitation.—H. E. Burtt (Ohio State).

416. Bachmann, J. Graphologie und Berufsberatung. (Graphology and vocational guidance.) *Z. pädag. Psychol.*, 1936, 37, 381-385.—Bachmann believes that graphology is by far the most important aid in determining endowments important in any vocation, e.g. industry, exactness and order. It gives more reliable information than psychotechnics as to attitude toward work, although it cannot replace psychotechnics in other tests.—M. E. Morse (Baltimore).

417. Brugger, H. Contributo alla psicologia degli infortuni automobilistici. (A contribution to the psychology of automobile accidents.) *Arch. ital. Psicol.*, 1936, 14, 55-57.—Reduction of the accident rate from automobiles requires attention not only to legislation dealing with the machine and the movement of traffic, but to the personality and especially the temperament of the driver. Generalizations as

to these internal factors are drawn from a questionnaire given to drivers of varying experience.—C. J. Herrick (Pennsylvania).

418. Canty, A. A note concerning the examination of traffic offenders. *J. appl. Psychol.*, 1936, 20, 493-498.—A review of practical approaches in reducing accidents and a brief outline of the physical, psychiatric and psychological procedures used with traffic offenders in a special division of the Psychopathic Clinic in Detroit.—R. S. Schultz (Psychological Corporation).

419. Cimatti, L. *Educazione preprofessionale*. (Preprofessional education.) Torino: Giappichelli, 1936. Pp. 388. L. 35.—This book is divided into five parts which touch on all the problems of psychotechnology. In the first part the author reviews in a few words the history of the scientific and rational organization of work and the history of psychotechnology itself. The second part concerns individual development from the physical, psychological, and emotional viewpoints, and the relation of the individual to his environment. The third part deals with man's work for the physical and psychological development of the body, problems of art, of morality, of faith in relation to work, and the importance of action as a field of psychological research. In the fourth part the author deals with the important problems of orientation, viz., with the data on the history of the subject, the questionnaire given him, etc. He also expresses some ideas on the nervous system, the physiology of the vegetative life, and their relationship. The fifth part is devoted to problems of vocational guidance, i.e., an analysis of vocations and a description of psychotechnical laboratories and their methods and apparatus. Complete bibliography.—G. M. Hirsch (Rome).

420. Ckawkina, N. H., & Chkolnikowa, P. B. [Rationalization of the conditions of work.] *Gig. Bezopas. Trud.*, 1934, 5, 27-29.—If the area in which the person has to work is limited a seated posture is adequate. If he must cover considerable ground it is better to stand.—H. E. Burt (Ohio State).

421. Copeland, H. A. Some characteristics of three tests used to predict clerical success. *J. appl. Psychol.*, 1936, 20, 461-470.—The Otis S-A test of mental ability, Minnesota clerical, O'Rourke clerical reasoning and clerical problems when administered under work limit and time limit show a strong influence of a speed factor. The speed factor is most pronounced for the Minnesota clerical test. Speed on this test correlates negligibly with the Otis S-A test administered under work limit condition. Interrelations among the various tests in this study and practical considerations seem to show particular advantage for the Otis S-A and the Minnesota clerical test. The possibilities of no scoring and using the number of attempts on the Minnesota clerical test as a valid score are considered.—R. S. Schultz (Psychological Corporation).

422. Dietsch, W. *Über Funkveranlagung*. (Concerning telegraphic aptitude.) *Beih. Z. angew. Psychol.*, 1936, No. 72, 140-148.—The author discusses the requirements for telegraphic work, and the

testing of this aptitude, under the following headings: (1) interest and ability to attend, (2) acoustic reception and differentiation by the ear, and (3) intellectual apprehension of the symbols and their interpretation. Emotional stability under test situations, physical fitness, sensory dominance (e.g. visual or auditory), sense of rhythm, which affects speed of code reception, reaction time, and such other factors as dependability, trustworthiness, etc., are discussed. The study is made with reference to military telegraphic service.—G. F. J. Lehner (Brown).

423. Fujimoto, K. On the sense organs employed in executing a given task. I. On the telegraph transmission, when silent or ordinary keys were used. *J. Sci. Labour* (Japanese), 1936, 13, 193-202.—Two telegraph operators were used as subjects in order to determine whether telegraph sending is more efficacious when intensity of key sound is purposely increased or when it is damped. Results obtained show that elimination of key sound tends to give rise to disturbance of work rhythms and makes errors in sending more numerous. Introspectively the subjects feel diffident on account of the lack of acoustic cues.—R. Kuroda (Keijo).

424. Galton, H. B., & Griffith, W. The relation of occupation and social status to the incidence of neuroticism. *Psychol. Bull.*, 1936, 33, 620.—Abstract.—R. H. Brown (Yankton).

425. Gatti, A. *L'avviamento al lavoro dei minorati non ricoverabili—principii e metodi*. (The return to industry of permanently disabled workmen—principles and methods.) *Arch. ital. Psicol.*, 1936, 14, 32-49.—Current methods of vocational guidance of the permanently disabled are discussed, and a statement made of the principles used by the Center for Labor Study at Turin. The process is divided into three parts: the clinical examination, showing what is contraindicated; the psychotechnical examination, showing the residual competencies; and placement at work. The examination must in every case cover both the specialized knowledge and the personality of the workman. Heavy stress is laid on the interview, and on appraisal of the psychological imperfections as contributing to the development of compensatory function.—C. J. Herrick (Pennsylvania).

426. Gatti, A. *La rieducazione professionale dei minorati negli Stati Uniti*. (Vocational rehabilitation of the disabled in the United States.) *Arch. ital. Psicol.*, 1936, 14, 50-54.—The methods of organized rehabilitation work, and statistics as to its scope, cost, and support from federal, state, and private sources, are presented in brief, critical review.—C. J. Herrick (Pennsylvania).

427. Grunwaldt, H. H. *Psychologische-pädagogische Probleme in den Heeresdienstvorschriften*. (Psychological-pedagogical problems in army service regulations.) *Beih. Z. angew. Psychol.*, 1936, No. 72, 173-196.—After an historical account of military development with reference to grouping and formations of soldiers, the duties and ethical requirements of officers and men, the physical and psychological effects of marching in unison, etc., the author ex-

amines the service regulations of the German army from the psychological and pedagogical points of view, considering (1) to what extent they are based upon and arouse thought, (2) to what extent they take into account and foster will, and (3) to what extent feelings are considered, aroused, and given expression. Hero worship and its effect upon the morale are referred to.—G. F. J. Lehner (Brown).

428. Hellerstein, S. G. The foundations of psychotechnics as applied to the field of industrial psychology in the U.S.S.R. *C. R. Conf. int. Psychotech., Prague*, 1934, 8, 103-107.—A study of psychological factors in industry, including training in industrial skills, learning curves, and suggested training programs in the chemical industry.—H. E. Burt (Ohio State).

429. Johnson, E. H. Objective tests, including the Bernreuter Personality Inventory, as constructive elements in a counseling technique. *Amer. J. Orthopsychiat.*, 1936, 6, 431-436.—This writer has found the technique of testing and that of analysis mutually helpful in the counseling relationships. Three cases are described in which the results of tests led to an establishment of a therapeutic relationship concerning especially the immediate problems of the client.—J. McV. Hunt (Brown).

430. Kreipe, K. Über Funkveranlagung. (Concerning telegraphic aptitude.) *Beih. Z. angew. Psychol.*, 1936, No. 72, 148-153.—This is an extension of the work of W. Dietsch, giving a detailed discussion of such specific factors as differential sensitivity for: (1) frequency, (2) durational length of tones, (3) intensity, and (4) tonal qualities (*Klang*). All these affect reception and interpretation of sound symbols. Acoustic-rhythmic patterns and the relative merits of visual or auditory dominance are discussed. The study is made with reference to military service.—G. F. J. Lehner (Brown).

431. Kuchynka, K. La sélection des employés de l'administration publique par les examens psychotechniques. (Selection of public administration employees by psychotechnical examinations.) *C. R. Conf. int. Psychotech., Prague*, 1934, 8, 131-134.—A correlation of .21 was obtained between intelligence and ratings in public service. Some of the discrepancies are due to personality factors or lack of education.—H. E. Burt (Ohio State).

432. Lahy, J. M., & Korngold, S. Sélection des opératrices des machines à perforer, Samas et Hollerith. (Selection of operators for Samas and Hollerith punched card machines.) *Travail hum.*, 1936, 4, 280-290.—Analysis of the punching operation and selection of tests of the requisite aptitude. Tests include attention, memory, intelligence, coordination, fatigue, ambidexterity. Rankings as to speed and accuracy in the job correlate highly with ranks on the battery of tests. Intelligence and memory receive negative weight.—H. E. Burt (Ohio State).

433. Laugier, H., & Weinberg, D. Le laboratoire du travail des chemins de fer de l'Etat Français. (The work laboratory of the French Government railroad.) *Travail hum.*, 1936, 4, 257-268.—Descrip-

tion of the laboratory, at first portable and later fixed, for measuring numerous physiological and psychological characteristics. Measurements include electrocardiogram, sensory acuity, reaction time, intelligence. Floor plan of the laboratory, photographs of test projects, data as to the number examined.—H. E. Burt (Ohio State).

434. Laugier, H., & Weinberg, D. Étude et orientation professionnelle des jeunes délinquants: un laboratoire ambulatoire de psychophysiologie. (Study and vocational guidance of young delinquents: a portable psychophysiological laboratory.) *Travail hum.*, 1936, 4, 269-279.—A laboratory installed in a large bus equipped for various physiological measurements and also for simple and choice reaction time intelligence tests, manual skill and sensory acuity.—H. E. Burt (Ohio State).

435. Longstaff, H. P. Trade name hurdles. *J. appl. Psychol.*, 1936, 20, 438-441.—Ten best "names" tested for qualities of a good trade name and devised for a tooth powder were orally presented to a group of students. 113 different names or combinations of the original ten names or misspellings were reported. This study is in agreement with previous studies and indicates a need for carefully pretesting trade names.—R. S. Schulte (Psychological Corporation).

436. Masuhr, H. Zur Offizieranwärter-Bewährungskontrolle. (Concerning officers' evaluations.) *Beih. Z. angew. Psychol.*, 1936, No. 72, 139.—The comparison of judgments of official attendants with the judgments of troops and the military school is an aid in discerning psychological differences for military purposes.—G. F. J. Lehner (Brown).

437. McMurtry, H. C. The possibility of diagnosing interest and ability through tests of technical vocabularies. *Psychol. Bull.*, 1936, 33, 622.—Abstract.—R. H. Brown (Yankton).

438. Metz, P. Funktionale und charakterologische Fragen der Fliegereignung. (Functional and characterological problems of aviation aptitude.) *Beih. Z. angew. Psychol.*, 1936, No. 72, 153-172.—The large differences in ability to learn to fly point toward a "flying talent," and the factors which influence this are discussed. Of particular importance is the ability to orient in three-dimensional space, which involves, among other things, vision, the vestibular organs, and the muscle and pressure senses. The author finds vestibular stimuli absent in a majority of the cases where they might be expected; furthermore, when they are present, they are of no value and serve to disrupt rather than aid the flyer. The biological and characterological significance of flying is considered in the light of such factors as constant alertness and tension, the sense of insecurity and fear (which must be repeatedly conquered or suppressed), devotion to duty, will power, hardness, and self-discipline.—G. F. J. Lehner (Brown).

439. Mierke, —. Die soldatische Haltung zur Angst. (The attitude of soldiers toward anxiety.) *Beih. Z. angew. Psychol.*, 1936, 72, 1-25.—Describing the types of fear, the real or "existential" fear, and the neurotic fear, with a word about their physiological basis in (1) the vegetative nervous system,

(2) the ductless glands, and (3) the electrolytic-chemical constitution of the body tissues, the author points out that fear cannot be treated as an isolated affective element of a psychical nature, but must be considered in relation to the individual's entire make-up. The physiological state is an important determiner of the effects fear will have. Subjective factors, e.g. anticipation, a sense of uncertainty and inferiority, as well as suggestions, activity and companionship may serve either to facilitate or to inhibit fear. Two main ways of reacting to fear are: (1) excessive (often largely incoordinated) activity, or (2) complete inactivity. Various attitudes are discussed, e.g.: (1) egotistical fear, resulting from over-valuation of self, (2) naïve thoughtlessness, (3) assumed bravery, (4) true bravery. The author finds typical reaction patterns to fear which correlate with such character types as are given by Jung, Jaensch, Kretschmer, and Ach. The conquest of fear, it is pointed out, demands a subjugation of the ego to a common ideal and the imperative demands of duty.—G. F. J. Lehner (Brown).

440. Miles, G. H. **Psychological considerations involved in the application of motor driving tests.** *C. R. Conf. int. Psychotech., Prague, 1934, 8, 257-262.*—The public should be better informed regarding psychological tests for drivers, and the cost of the apparatus should be reduced. Commercial transport companies should be informed of the possibilities in such tests.—H. E. Burtt (Ohio State).

441. Pellegrini, A. **Analisi psicologica della pubblicità. Principali problemi di pubblicità grafica.** (A psychological analysis of advertising. The principal problems of display advertising.) *Arch. ital. Psicol., 1936, 14, 110-122.*—The attentional values of color, form, orientation, and arrangement in poster design are studied under direct observation and under indirect observation in which the attention is diverted by tasks presented on the posters. Both children and adults were used as subjects. The two groups and the two types of observation give different results, which are discussed in relation to the practice of advertising. Illustrated with line drawings.—C. J. Herrick (Pennsylvania).

442. Ponzo, M. **Finalità ed attività del centro psicotecnico di consulenza e di ricerca dell'E.N.I.O.S.** (Aims and activities of the psychotechnical center for consultation and research of the ENIOS.) *Difesa soc., 1936, 15, 9-15.*—The author repeats here the facts presented in his communication to the sixth Congress for Roman Studies, held at Rome in October, 1935. He deals with the origin and the aims of the psychotechnical center of the Italian National Institute for the Scientific Organization of Work (ENIOS), mentioning the steady progress particularly in the examination of the personality of the workers to obtain better productivity. The author mentions the collaboration with the Institute of Psychology of the University of Rome, and hopes for the integration of this psychotechnical center with other ventures of a more limited sort, according to discussions which have occurred on this project in the National Parliament.—G. M. Hirsch (Rome).

443. Ponzo, M. **Signification des temps de reprise en psychologie générale et leur valeur d'utilisation**

**psychotechnique.** (Significance of recovery time in general psychology and its psychotechnical use.) *Travail hum., 1936, 4, 291-302.*—Reaction time was measured by pressing a key, and a record was also made of the time required in releasing the key after the major reaction. Recovery time is considered as a separate reaction time. Correlations between the two times are small, although either is statistically reliable. Recovery time may be of practical significance in selecting automobile drivers, for whom it is necessary to react to crucial situations successively.—H. E. Burtt (Ohio State).

444. Sacerdote, A. **L'opera del clinico per l'avvicinamento al lavoro dei minorati non ricoverabili.** (The operation of the clinic for the return to industry of permanently disabled workmen.) *Arch. ital. Psicol., 1936, 14, 16-31.*—Clinical problems in the vocational guidance of the disabled are examined by distinguishing various forms of disability and the work incompatible with each, with special reference to workers with the following disabilities: arrested and incipient tuberculosis, congenital defect, injury in youth, subacute or chronic functional disability, and neurotic or psychopathic personality. Case studies of functional adaptation and development of vicarious function are reported.—C. J. Herrick (Pennsylvania).

445. Shibayama, Y. **On the lighting in factories.** *J. Sci. Labour (Japanese), 1936, 13, 41-50.*—There are factories where the general lighting is good while the illumination of work surface is very bad. This comes not only from defects in the structure of the buildings themselves, but also from negligence and uncontrollableness in the arrangement of working tables and work method, incomplete skylight, insufficient cleaning of glass windows, and inadequate paint.—R. Kuroda (Keijo).

446. Sweltzer, C. H., & Adams, C. R. **Relation between the amount of academic training and job performance.** *Bull. Amer. Ass. colleg. Registr., 1936, 12, 15-22.*—Job performance of 3918 visitors in the Pennsylvania Relief Administration was evaluated. "Although there has never been a minimum level of education required of a candidate, there has been a minimum level of education and experience combined." Education ranged from one year of high school to four years of professional training. A test of technical information was administered. Mean test scores increased with education ( $r = .24$ ). No relation was found between amount of education and job merit ranking.—M. E. Wagner (Buffalo).

447. Tucker, B. R. **Expert testimony and its relation to mental responsibility and neurological injury.** *Virginia med. (Semi-) Mon., 1936, 63, 267-271.*—R. R. Willoughby (Brown).

448. Venturi, A. **Il problema sociale dei lavoratori minorati.** (The social problem of disabled workmen.) *Arch. ital. Psicol., 1936, 14, 13-15.*—After classifying the various kinds of disability, and summarizing present legislation, the author discusses in detail the social and economic aspects of disability in those who have once been employed. The responsibility in such cases lies with the Fascist Syndicalist Associations, and it should be squarely met. An integrated program is outlined through which medical and psycho-

technical findings will be used in scientific guidance into vocations fitted to the residual capacities of the clients.—*C. J. Herrick* (Pennsylvania).

449. Warren, N. Over-compensation in finger timing as a factor in typewriting errors. *J. educ. Psychol.*, 1936, 27, 467-470.—Preceding studies (*J. exper. Psychol.*, 1934, 17, 246-256; *Amer. J. Psychol.*, 1936, 47, 580-596) have shown that there is a tendency for the non-preferred hand or little-used finger to precede the preferred hand or finger when it is intended that the two hands or fingers shall move simultaneously. Analysis of typewriting errors indicates that the order of finger movement may be influenced by this factor of over-compensation so as to result in transpositions.—*A. W. Melton* (Missouri).

450. Wexberg, E. Individual psychology and vocational guidance. *Int. J. indiv. Psychol.*, 1936, 2, No. 3, 73-82.—The plan for a vocation, as it is formed in childhood, influences the development of the personality. The factors determining ideas about vocation may be peculiar organic dispositions, evidenced by either superior or inferior functioning; or they may be attitudes toward parents or other relatives. The child is likely to imitate the vocational choice of a parent he likes, but may shun the vocation of one that he dislikes or of one to whom he feels hopelessly inferior. Early educational experiences may also crystallize vocational choice prematurely. The importance of play can scarcely be overrated. Physical and mental skills are developed in play, as are attitudes of responsibility and planned cooperation in the interests of a common purpose. Training and coaching in school are often overdone. The best help with regard to future vocation may be given by preserving the mind's plasticity as long as possible. In our time of widespread unemployment, readiness for quick adaptation is important. This is considerably impaired by precocious specialization. Vocational guidance should consider first the economic situation, then the youth's inclination, and last his native ability and training to date.—*M. F. Martin* (West Springfield, Mass.).

451. Zilian, E. Gesichtspunkte der Rassenseelenforschung im Bereich der Wehrmachtpsychologie. (Aspects of psychological racial investigation in the field of war psychology.) *Beih. Z. angew. Psychol.*, 1936, No. 72, 86-89.—The interests of war psychology in racial psychology are twofold: (1) the individual's attitude towards war, and (2) the racial substratum upon which individual psychology is based and which it in turn helps to form. However, the opportunities which permit of an investigation of war psychology also offer the possibility of obtaining a clearer picture of racial differences. Typological psychology offers itself as psychological anthropology.—*G. F. J. Lehner* (Brown).

[See also abstracts 94, 132, 150, 362, 487.]

#### EDUCATIONAL PSYCHOLOGY (incl. Vocational Guidance)

452. [Anon.] La preparazione psicologica degli insegnanti di educazione fisica e l'orientamento professionale. (Vocational guidance and the psycho-

logical training of teachers of physical education.) *Orient. prof. Boll. Inform.*, 1936, 14, 13-15.—Teachers of physical education can do valuable work in vocational guidance, since their contacts with pupils permit an appraisal of the entire personality and a good opportunity to influence it. The courses in psychology given in Italy to prospective teachers of physical education are listed briefly; they may be expected to have a favorable influence on the middle schools of the country.—*C. J. Herrick* (Pennsylvania).

453. Atchoulere, V. [Principles and methods in grouping pupils in professional schools in U.S.S.R.] *Sovetsk. Psikhotekh.*, 1934, 7, 38-47.—The following factors should be considered: the subject which the group is studying, the general level of advancement, and academic background. It is suggested that the groups should enroll different social levels and both sexes. Information tests are somewhat superior to intelligence tests for classification, as they tell the teacher where to begin.—*H. E. Burt* (Ohio State).

454. Bryan, N. R. The effect of a higher standard policy on the distribution of grades. *Sch. & Soc.*, 1936, 44, 439-440.—Data are presented to show that an effort to raise the grades of students at the University of Maine has had a definitely favorable effect. The class of 1938, subjected to pressure in the direction of improved scholarship, is contrasted with the class of 1927.—*H. L. Koch* (Chicago).

455. Cole, J. A. The junior scholarship system of Victoria. *Aust. Coun. educ. Res. Ser.*, 1935, No. 37. Pp. 67.—The author presents the results of an attempt to discover why scholarships can be more easily and more certainly gained in some Victorian schools than in others, year after year. Many schools provide special classes for scholarship candidates, although the training the children receive in these schools is not of the best type to guarantee continued success through the higher forms of the secondary school. It is recommended that special coaching for the examination be discountenanced, and that intelligence tests and the reports of teachers be used as supplements to the examinations in selecting the candidates. The junior scholarships entitle their holders to free tuition in the state secondary schools, plus an allowance of £ 4 per annum for school requisites; for those electing to attend non-state secondary schools, the scholarships provide £ 12 per annum.—*L. A. Averill* (Worcester Teachers College).

456. Dietz, C. La sélection des élèves de l'enseignement secondaire. Recherches de statistique mathématique et de psychologie expérimentale. (Selection of pupils for secondary education; statistical and experimental-psychological research.) Paris: Thèse de la Faculté des Sciences, 1934. Pp. 117.—Intelligence tests are inadequate as a sole basis for selection. Social factors and previous academic background are important. Discrepancies between interest examinations and intelligence tests are traceable to physical difficulties and personality factors.—*H. E. Burt* (Ohio State).

457. Diserens, C. M., & Wood, T. W. The prevalence of belief in fortune telling among college students. *J. appl. Psychol.*, 1936, 20, 488-492.—A

questionnaire study among a group of 101 students in psychology classes reveals varying degrees of belief in fortune telling and its influence.—*R. S. Schults* (Psychological Corporation).

458. Douglass, H. R., & Michaelson, J. H. The relation of high school mathematics to college marks and of other factors to college marks in mathematics. *Sch. Rev.*, 1936, 44, 615-619.—Of college subjects carried by 387 members of the University of Oregon B.A., B.S., and business administration classes of 1930 only mathematics ( $r = .28$ ) is related to number of units of high school mathematics earned. The average mark in high school mathematics correlates with the various college subjects from  $r = .21$  (philosophy) to  $r = .46$  (French and mathematics); with an average of all college subjects the  $r$  is .44. In five instances the regressions are definitely linear. The relation between college mark in mathematics and (1) high school mathematics is  $r = .46$  (correlation ratio .55); (2) average high school mark in all subjects,  $r = .47$  (correlation ratio .59); and percentile rank in American Council psychological examination,  $r = .26$  (correlation ratio .39). The best multiple  $R$  is .50, lower than the better correlation ratios.—*M. E. Wagner* (Buffalo).

459. Forlano, G. F. School learning with various methods of practice and rewards. *Teach. Coll. Contr. Educ.*, 1936, No. 688. Pp. 114.—Six groups of pupils of grades 5A to 6B, totaling 623, were used as subjects to test the role of classroom recitation in learning. A different experiment was performed with each group. Under the conditions of the experiments, the superiority of recitation over reading is clear and definite. Recitation proved almost as efficient with sense as with nonsense material. In a second group of six experiments a total of 1294 pupils of grades 4 to 8 were used to study the influence of cash rewards on rate and amount of learning. Learning in response to a promise of a money reward is on the average slightly (not always statistically significantly) more efficient than learning without such a promise. Likewise learning in which the learner receives immediate knowledge of the results is apparently slightly superior to delaying the report of the results. An additional series of experiments with 40 children of grade 5B on the influence of reward is reported in the appendix. The results are variable and not consistent with the results obtained under schoolroom conditions. The bibliography lists 89 titles.—*J. M. Stalnaker* (Princeton).

460. Glatfelter, M. E. The value of the cooperative English test in prediction for success in college. *Sch. & Soc.*, 1936, 44, 383-384.—Correlations based on the records of 120 students were computed between the average grade made in the first year of work at Temple University and the following: score on the American Council psychological test, average grade earned during four years of high school work, and score on the sections as well as on the total cooperative English test. The correlations involving the last item were as high (.60) as those involving the other items. Even one section of the English—that on usage—seemed to be as valuable for predicting college

success as was the whole test, the aptitude test, or the high school record. Grades in freshman English correlated .66 with the score made on the section on usage in the English test and .63 with the score on the total instrument.—*H. L. Koch* (Chicago).

461. Gray, W. S. Reading difficulties in college. *J. higher Educ.*, 1936, 7, 356-362.—Recognizing that students vary greatly in reading ability, the colleges have attempted to deal chiefly with the extremes. Students superior in reading speed and comprehension have been challenged to read for honors and explore independent study programs. The large group of average reading ability have been left to the regular run of inspiration and application. Reading deficiencies have been investigated at some length. Five factors or groups of factors have been found basic to reading deficiencies: limited mental ability, limited vocabulary, inappropriate attitudes and ineffective habits of thinking, persistence of immature habits of early reading, and visual defects. The author reports the development of individual reading profiles at Michigan Central State Teachers College. The profiles, based on a battery of tests and visual examinations, are used for diagnostic and remedial application to individual problems. Individual conferences, group discussions, and preparation of reading reports follow. The specific guidance and practice are divided over three semesters as follows: individual use of manuals, special interest material, and group general interest materials. This program has recognized that the average as well as the poor reader can greatly improve his reading efficiency. The greatest effort still remains, however; the individual instructor must stimulate the use of appropriate habits in the course work.—*R. A. Brotemarkle* (Pennsylvania).

462. Hardy, M. C. Improvement in educational achievement accompanying a health education program. *J. educ. Res.*, 1936, 30, 110-123.—A study of 815 children who had been subjected to two years of a health education program. The intelligence, educational, reading, arithmetic and spelling quotients were obtained for each of the 409 cases completed. A statistical study of the results indicates that the students who had participated in the health education projects exceeded the grade standards for all of the standardized tests.—*S. W. Fernberger* (Pennsylvania).

463. Hegge, T. G., & Ward, L. B. Remedial reading methods. *Amer. J. Orthopsychiat.*, 1936, 6, 421-430.—Two remedial methods of teaching reading are described: one utilizes emphasis upon reading as a response to meanings and contextual material and is similar to modern methods of classroom teaching, and the other emphasizes phonetic analysis, vocalization, and sound blending. The advantages and limitations of the second method are stressed.—*J. McV. Hunt* (Brown).

464. Hirsch, G. Die Erziehungsfrage der naiven Kindheit. (The educational problems of naïve childhood.) *Z. pädag. Psychol.*, 1936, 37, 193-220; 361-370.—Hirsch analyzes the characteristics and manifestations of naïveté (the expression of the original totality of the personality uninfluenced by culture) in the child, youth and adult. Germany's

resurrection is due to a return to naïveté; directed socio-politically, and its mass phenomena are manifestations of the naïve man. The intellectual is turning from scientific thought to world-astounding deed and the "irrational must," while youth is fanatically concerned with non-practical, non-cultural fantasy. Education should so form the pupil's idea of reality that his naïveté will be absorbed into the depths of his personality. The teacher himself must be naïve, imparting only the culture from which the vital stream arises, discarding rational systems, and fostering intuition, fantasy, and work which leads not to thought but to expression. He must accompany his pupil through the naïve phase in order to prevent error and breaking, and to insure growth.—*M. E. Morse* (Baltimore).

465. Horejsi, J. The psychological aspect of the so-called practical exercises in secondary schools. *C. R. Conf. int. Psychotech., Prague*, 1934, 8, 747-749.—Factors favoring the exercises include desire for activity, curiosity, contrasting theoretical studies, and opportunity to make contacts with practical men. Unfavorable factors include lack of interest after the first curiosity is satisfied, dislike of regular work, and routine character of available activities.—*H. E. Burt* (Ohio State).

466. Johnson, P. O. The differential functions of examinations. *J. educ. Res.*, 1936, 30, 93-103.—A description of results from the University of Minnesota which form part of a program for more accurate appraisal of student accomplishment. The present paper is concerned with a measurement of acquisition of terminology and fundamental principles, and of the ability to apply both in the interpretation of new situations and problems. Sample examinations in the fields of physics and human biology are given. The results indicate that it is excellent educational practice to determine exactly the desired outcomes of instruction and to frame the examinations with these objectives clearly in mind.—*S. W. Fernberger* (Pennsylvania).

467. Kalliaphas, S. M. Die Bedeutung der praktischen Psychologie für den Erzieher. (The importance of practical psychology for the educator.) *Zbl. Psychother.*, 1936, 9, 37-40.—Kalliaphas, a teacher in a normal school at Athens, believes that the educator should be prepared to deal with the simpler emotional disturbances of his pupils. This requires some knowledge of depth psychology and especially of characterology. Particularly significant in this regard are Kretschmer's theory of constitution and Jung's theory of the unconscious, the latter because it is more inclusive than those of Freud and Adler and recognizes the ethical motive. The method for the teacher is anamnestic analysis. Actual analysis of the unconscious should be employed with the utmost caution, although narration of dreams and fantasies is helpful for the teacher. The compensatory function of the unconscious is of great value in directing attention to neglected functions and consequently in planning activities.—*M. E. Morse* (Baltimore).

468. Kelchner, M. Die Naturbedingtheit des pädagogischen Zieles und ihre Ausprägung in der Mädchenerziehung. (Educational aim as conditioned by nature, and its expression in girls' education.) *Z. pädag. Psychol.*, 1936, 37, 370-381.—Kelchner recognizes four unchangeable personality types: dynamic, static, imaginative, and logical-abstract. Each type strives, as a biological necessity, to fulfil itself. All types are found in each sex, but the static type predominates in girls. This is characterized by a strong emotional life, which directs the personality; sympathy; and wisdom, culminating in the philosopher. Artificial limitations on the development of any type are dangerous because thwarting causes it to assume undesirable forms. None of these types is inimical to maternity any more than to paternity. The desideratum for girls' education is not a restricted feminine ideal but the vital law common to all human beings. Women's urge to share in national life is not exhausted in the manifestations of the static type. Their fields of activity are determined by personality type. The author discusses the working out of the different types among women in the professions, other vocations and the home.—*M. E. Morse* (Baltimore).

469. Lehman, H. C. Hazards encountered when attempting to equate fraternity and nonfraternity students. *J. appl. Psychol.*, 1936, 20, 451-460.—Attempts to equate fraternity and non-fraternity students are of doubtful validity. Studies on the influence of fraternity upon scholarship must consider rejected fraternity pledges, motivation, and control groups.—*R. S. Schultz* (Psychological Corporation).

470. Mandell, S. School problems and the family constellation. *Int. J. indiv. Psychol.*, 1936, 2, No. 3, 83-94.—The Stanford-Binet, the Woodworth-Cady psychoneurotic questionnaire, and a battery of performance tests were used with children referred to a clinic from a public junior high school. Case histories reported here show that the family constellation partly determines the way the child's intelligence and personality affect his school adjustment. Tests are sharp tools, useful only in skilled hands. The clinic should always seek to understand the child's goal before prescribing for his re-education.—*M. F. Martin* (West Springfield, Mass.).

471. Mann, C. W. Education in Fiji. *Aust. Coun. educ. Res. Ser.*, 1935, No. 33. Pp. 138.—This is a report written by the author at the request of the Methodist Missionary Society of Australasia. The chapters include: Fiji today; the racial background; history of educational progress; the present responsibility for education; the process of schooling; and the future of education in Fiji. The author was sent from the Teachers College in Sydney to make the survey. Of interest are the results of certain standardized tests given to 39,000 pupils by the investigator in an endeavor to measure a sample of the school population, including European, Indian and Fijian children. Tests in reading and in arithmetic were administered. In the main, the European children scored highest, the Indians second, and the Fijians lowest. The curves show a dip in achievement in the

European children at 14 years and a corresponding dip in the achievement of the Fijian children at 13 years. The author speculates as to the possible explanation for the earlier slump of the Fijians, but does not suggest any reliable conclusion.—*L. A. Averill* (Worcester Teachers College).

472. McGrath, E. J., & Froman, L. A. College aptitude of adult students. *Univ. Buffalo Stud.*, 1936, 14, 1-34.—An investigation of the characteristics of 1629 evening session students at the University of Buffalo shows that seven eighths are under 36 years of age, one eighth under 20. Almost 95% have completed high school and three fourths have done some academic work in an institution of higher learning. The evening session students (1296 were tested) were slightly superior to freshmen on a 10-minute opposites test, though inferior to seniors in the regular college session. Students enrolled in social work classes ranked highest, arts and science students next, and students in courses offered for the American Banking Institute and the Buffalo City Hospital ranked definitely lower than all registrants. Students carrying but one course ranked lower in test score but higher in grades than all evening session students. Mean test scores of the various occupational groups showed the professional groups to rate higher and the business groups lower.—*M. E. Wagner* (Buffalo).

473. McIntyre, G. A., & Wood, W. The standardization of an Australian reading test. *Aust. Coun. educ. Res. Ser.*, 1935, No. 39. Pp. 71.—A reading test consisting of five parts and including: vocabulary, speed of reading, reading for general significance, reading for details, and reading for inference, was constructed and given to 33,000 children in schools throughout Australia. The statistical methods utilized for establishing grade norms, age norms, scale scores, and the reliability of the tests are described in detail. It was found that girls tend to read faster than boys, but that boys have a greater scatter of abilities; i.e., more of them are very low and very high. Children in cities tend to read better than children in the country. Regional differences were accounted for on the basis of the different ages at which children are admitted to school.—*S. A. Kirk* (Milwaukee State Teachers College).

474. Montessori, M. Les étapes de l'éducation. (The stages of education.) Paris: Desclée & de Brower, 1936. Pp. 40.—The author shows how the "new education" represents a profound social movement and how her methods have totally changed the fundamental point of view through seeking, as the essential purpose of education, to develop the personality of the child and the adolescent even at the sacrifice of former discipline and a large part of the old culture.—*M. H. Piéron* (Sorbonne).

475. Peck, L. A study of the adjustment difficulties of a group of women teachers. *J. educ. Psychol.*, 1936, 27, 401-416.—100 women teachers, 52 women students who were not teachers, and 26 men teachers were given the Thurstone personality schedule and the Otis S-A test of mental ability; they also filled out a personal data sheet and estimated their own adjustment on a 5-point scale. A detailed study of

the Thurstone scores and the personal data sheets was made in order to discover the signs of maladjustment peculiar to women teachers. The women teachers were less well adjusted than either the men teachers or the women who were not teachers.—*A. W. Melton* (Missouri).

476. Reinhardt, E. Vocational expectations of freshmen in a teachers college. *Sch. & Soc.*, 1936, 44, 518-520.—In 1930, 359 freshmen at the Eastern Illinois State Teachers College answered a questionnaire concerning their vocational intentions; in 1935, 271 freshmen did the same. The data from the 1935 group, considered with relation to those from the 1930 group, show the following trends: an increase in the percentage of students (1) who planned to teach, (2) who expected to make teaching a stepping stone to another occupation, (3) who expressed the intention to enter agriculture or engineering after teaching a while, and (4) who wanted to teach in high schools; and a decrease in the length of time the students expected to teach, as well as a decrease in the percentage who desired to be placed in a rural one-room school. The author concludes that the curricula of the college should be professional, with emphasis on preparation for classroom teaching.—*H. L. Koch* (Chicago).

477. Root, A. R. College achievement. *J. higher Educ.*, 1936, 7, 387-388.—The study of college achievement at Hamline University for several years reveals a marked disparity between coefficients of correlation with the commonly employed measures of high school achievement, college aptitude, general intelligence, English training, freshman English marks, and certain personality tests. These correlations range from .71 to .03. The best single criterion is the freshman English mark. Prior to entrance the best single criterion is high school rank. Pooling of certain scores, such as high school rank and college aptitude rank, lowers the correlation. Certain multiple correlations, employing such batteries as high school rank, college aptitude, Otis scores, and marks in freshman English, reach .83. The present plan of the study seeks to attain a correlation of .90.—*R. A. Brotemarkle* (Pennsylvania).

478. Sarbaugh, M. E. Articulation in English. *Univ. Buffalo Stud.*, 1936, 13, 57-75.—A review of aims and goals recognized as important by teachers of English in high schools and colleges shows lack of unanimity. The seminar method of preparing for college-credit-in-advance examinations in English is described; four such groups are described. 68 students wrote the examination for the first semester of freshman college English, 56 obtained full or part credit; 78 attempted the second semester's examination, 69 obtaining credit. The experiment in anticipating college credit in English at Buffalo indicates that the amount of additional work which a superior high school senior must do to obtain a creditable grade and four or six semesters of credit is not excessive and a technique for encouraging and directing such effort is relatively simple.—*M. E. Wagner* (Buffalo).

479. Sarbaugh, M. E. Effect of home surroundings on academic achievement. *Univ. Buffalo Stud.*,

1936, 13, 245-276.—A study of home backgrounds of 150 high school seniors in four groups: (1) 62 who earned high scores on intelligence tests and whose high school records were also good; (2) 27 who possessed superior intelligence-test ability but whose high school work was average or low in quality; (3) 50 with scholastic aptitude scores reliably lower than (1) and (2) and with poor achievement records; and (4) 11 who in spite of definitely lower rankings in mental tests achieved relatively high secondary school records. These groups are investigated for differences in paternal occupation, home ownership, valuation of residence, employment of mother, wage earning activity of students themselves, nationality, language spoken in the home, parental education, size of home libraries, magazines received in home, interest in music, taste in radio programs, student health, death or separation of parents, position among siblings, fraternity and sorority activities, frequency of evenings spent away from home, favorite evening pastime, favored school subjects, interests of students, and home discipline. The groups studied came from economically superior homes and superior paternal occupations. The generally better motivated students, while not differing markedly from those less ambitious, have (1) a greater breadth of interests, (2) a greater number of magazines available in the home, (3) less interest in sororities and fraternities, (4) less direct study supervision by parents, (5) greater confidence in and enjoyment of school subjects, (6) homes of comfortable but not high economic status. No evidence that abler students were at a social disadvantage was found.—*M. E. Wagner* (Buffalo).

480. Seitz, J. A. **Variability of examination results.** *Aust. Coun. educ. Res. Ser.*, 1936, No. 43. Pp. 55.—Presents the results of a study of the public examinations of school candidates at the University of Melbourne during the period from 1922 to 1933, inclusive, at three stages, as follows: (1) at the intermediate certificate stage, or at about the age of 16; (2) at the leaving certificate stage, at 17; and (3) at the leaving certificate honors stage, at 18. Considerable inconsistency is found in the various subjects from one stage to another in the standards attained, and more objective tests are recommended in certain subjects. Graphs of the complete study are presented.—*L. A. Averill* (Worcester Teachers College).

481. Sen, J. M. **Measurement in education.** *Indian J. Psychol.*, 1936, 11, 1-15.—This presidential address in the section of psychology of the 23rd session of the Indian Science Congress relates itself to the question of the accuracy or inaccuracy of measurement in education. The author suggests that while the results of education cannot be transmitted, educability can be. Nobody knows exactly what intelligence is, but the teacher can help to increase the IQ of every individual. Classification on the basis of mental age is prerequisite to all good classroom teaching. In India particularly, the problem of educating the increasing numbers of those who are seeking admission to the schools is a serious one, since it is extremely wasteful to attempt to teach all children

in undifferentiated groups. The history of intelligence testing in India is traced, and the need is emphasized for classification tests at the elementary and high school level and of accomplishment tests at the college level. Homogeneous grouping is a misnomer; ability grouping is sounder; individualization of education is the ultimate goal in education. The Spearman "g" factor must be permitted to grow freely and thus produce a better type of man. The "w" factor of Webb (persistence of motives) and the "c" factor of Garnett (originality) are likewise implicit in the meaning of intelligence.—*L. A. Averill* (Worcester Teachers College).

482. Shofstall, W. P. **Foreign language requirements for pre-professional study.** *Bull. Amer. Ass. colleg. Registr.*, 1936, 12, 11-14.—At the University of Missouri, except for law, college pre-professional foreign language grades are not related to subsequent grades in the professional schools.—*M. E. Wagner* (Buffalo).

483. Strabel, E. **The post-graduate high school student.** *Bull. Amer. Ass. colleg. Registr.*, 1936, 12, 1-10.—Investigates the effects of post-graduate high school work upon subsequent college achievement. 54 students entering the University of Buffalo during 1926-1934, 33 since 1931, were studied. 68% took advanced mathematics, 68% science, 48% modern foreign language, 30% American or English literature, 24% a drawing course, and 24% a history of music, art, or harmony. Other subjects were taken by a small number of students. The 54 post-graduates were paired closely with an equal number of other college students for age at high school completion and year completing high school, rank in graduating class, New York State Regents average (excluding P. G. year), college curriculum, and percentile ranking on psychological examination. There was no reliable difference between these groups and all university students similarly graduated from Buffalo schools. The total group of post-graduates showed no reliable superiority in freshmen college average over either their paired controls or all university freshmen. However, they were superior in social sciences and poorer in mathematics. Those post-graduates completing high school since 1930 surpassed the earlier post-graduates in social sciences. The fifth year students are very similar to their controls in amount of extra-curricular activity. Evaluations of the post-graduate year by these students are presented. 44% worked (on the average 21 hours per week) during their freshman year.—*M. E. Wagner* (Buffalo).

484. Strabel, E. **The accelerated high school graduate.** *Univ. Buffalo Stud.*, 1936, 13, 79-99.—4% of Buffalo high school graduates (8714 cases during 1928-33) completed high school at 16 yrs. 6 mos. or less; 2.9% completed 15 high school units, including American history and four years of English, in three years. The rank position in graduating class for both the young and three-year graduates was higher than for all graduating groups. Analysis is made of methods of obtaining four years of English and of obtaining the 15th unit in three years. Three-year students of both sexes and honor-roll boys more

often attend college immediately upon high school completion, and young graduates less often, than do "no distinction" students; three-year graduates are most frequently employed. 55 three-year high school graduates (Univ. of Buffalo entrants 1925-33) were paired for age at high school completion, sex, psychological test scores, and rank in graduating class with 55 four-year high school graduates. A second control group were similarly paired except that age at high school entrance (one year older at graduation) was used. No reliable differences in calibre of college freshman work appeared; the older group was slightly better in mathematics, the three-year group in social sciences. The three-year graduate is more frequently a "middle" child, has more brothers and sisters, more often has foreign-born parents and parents of less education, frequently is bilingual; and slightly less often takes part in extra-curricular activities.—*M. E. Wagner (Buffalo).*

485. Strabel, E. Post-graduates and those out of school between high school and college. *Univ. Buffalo Stud.*, 1936, 13, 101-112.—During 1926-30, 86 students (65 boys, 21 girls) did not come to the University of Buffalo directly upon completing high school. They were definitely inferior to all entrants in Regents Examination grades, but very similar in age at high school completion and in psychological test score. They came from a slightly lower economic level. 74% were employed in the interim between high school and college; 3% had been ill during this period. The 86 out-of-school students were paired for sex, age at high school completion, high school attended, Regents average, and psychological test score with other students coming to the University immediately upon high school graduation. The out-of-school students were inferior, however, on Iowa High School Content scores. 44 high school post-graduates entering college during this period were found to be almost identical with the control group in the measures above listed. Boys out of school two years or more were definitely superior to all University of Buffalo entrants in college success as well as to their controls; boys out of school one year, their controls and those having taken a high school post-graduate course were all very similar in their success in college. The girls out of school for a year or more between high school and college were definitely more successful in college than all entrants (who are superior in measures cited above) as well as their controls. Similarly, girls who had taken high school post-graduate training were superior in college achievement to their controls. "Of the 'outs' 58% would remain away from school if they could repeat their lives; 40% would advise others to do likewise; 93% felt the intervening time had been valuable. 52% of the high school post-graduates would spend a fifth year in high school if they had it to do over again."—*M. E. Wagner (Buffalo).*

486. Strabel, E. A comparison of the various atypically aged groups. *Univ. Buffalo Stud.*, 1936, 13, 113-123.—This study compares the college success, home background, extra-curricular activities and scholastic attainment of three-year high school

graduates, young (16 yrs. 6 mos. or less) high school graduates (accelerated in grammar school or high school or both), high school post-graduates, those out of school a year or more between the two educational units, and all entrants for an identical period (1925-30). The three-year and underaged men are more likely to be graduated from law school; the post-graduates and out-of-school students from the school of business administration—no three-year graduate receives a B.A. degree without magna cum laude. Two thirds of the out-of-school B.A. men receive honors, 54% of the underaged, 46% of the post-graduates, and 48% of all male entrants. The percentages of candidates for M.A. degrees were 12 for the post-graduate men, 6 for the underaged, 4 for the three-year, 2 for the out-of-school, and 2.6 for all male entrants. The entrance requirements for those out of school (two years or more for men, one year for women) may be lower than for any other group; the three-year and young high school graduates are next best, other things being equal. The post-graduates and men out of school only one year do not deviate sufficiently from the average to warrant setting up special sets of entrance requirements.—*M. E. Wagner (Buffalo).*

487. Taylor, H. R. A comparison of criteria for admission to medical school, covering the period from 1926 to 1933. *Psychol. Bull.*, 1936, 33, 623.—Abstract.—*R. H. Brown (Yankton).*

488. Torgerson, T. L., & others. The Wisconsin plane geometry test, the Wisconsin algebra test, the Wisconsin biology test, the Wisconsin general science test, the Wisconsin American history test, and the Wisconsin language usage test. Milwaukee: E. M. Hale, 1936.—A series of achievement tests employed as a part of the state-wide testing program carried on jointly by the School of Education, the Department of Mathematics of the University of Wisconsin, and the Wisconsin State Department of Public Instruction.—(Courtesy *J. educ. Res.*)

489. Wagner, M. E. Unpredicted college achievement; a study of those who show inconsistency between high school and college success. *Univ. Buffalo Stud.*, 1936, 13, 183-236.—Purposes of the study are (1) to determine whether students definitely more or definitely less successful in college than would have been expected from their high school achievement might be identified at college entrance, and (2) indirectly to examine academic motivation together with some of its antecedents and correlatives. The subjects were all college entrants at the University of Buffalo for a six-year period—53 who did very much better (+2 PE) than expected, 105 who did somewhat better (+1 PE) than expected, 393 who did not deviate from their expected performance, 96 who did somewhat poorer (-1 PE), and 99 who did much poorer (-2 PE) than anticipated from their high school success. Over twenty types of measures were examined, many yielding differences between the groups studied. "By and large, the same factors which select for absolutely superior achievement (as found in other studies) also select for unexpectedly

high college grades. Such factors not only select for a greater success at any level but in addition seem to indicate a continued increase in ability. . . . To him whose academic endeavor is high shall be given an increasing ability to accumulate mental content."—*H. J. P. Schubert* (Buffalo).

490. **Wagner, M. E.** The effect of guidance upon senior high school marks. *Univ. Buffalo Stud.*, 1936, 13, 235-242.—In an attempt to determine what proportion of the academic improvement obtained as a result of how-to-study courses was due to guidance interviews (see XI: 491), 33 senior boys and 23 senior girls were interviewed and suggestions made concerning their academic future. As a control group, students from the same class, of the same sex, age, and curriculum, with nearly the same reading, high school content, and vocabulary abilities and pre-experimental high school success, were selected. The boys were interviewed in December and January of their senior year, the girls in February. The interviewed boys were reliably superior to their controls for the experimental year; for the girls no difference was found between the two groups.—*H. J. P. Schubert* (Buffalo).

491. **Wagner, M. E., & Strabel, E.** Teaching high school pupils how to study. *Sch. Rev.*, 1935, 43, 577-589.—This is a report of the effects of how-to-study class training upon groups (1) meeting throughout the school year (a) after school and (b) within the regular school day, and (2) for one semester twice as often within the school day. In addition to the regular units of training in reading, vocabulary, note-taking, memory, problem solving, taking of examinations, use of the library, and the like, each subject was given at least one guidance interview. The subjects comprised 111 students from two different schools; except for a few seniors, they were high school juniors. The results show a remarkable consistency between the groups in spite of the fact that some classes met after school, others during the school day, some five times a week one semester, and others twice a week one semester and three times the second. The junior-year performance of the trained students was significantly superior to that of pupils in the same grade, school, age, sex and curriculum, earlier school performance, and intelligence level. During the post-experimental period the trained groups lost some of the advantage gained during their junior year, although their average marks were still measurably above those of the control pupils. The experimental groups earned more units of credit during both junior and senior years, and carried a heavier load during and after the training period, failing and repeating fewer subjects, than the corresponding number of control pupils. "Although it may not be clear whether the course acted only as a motivational factor bringing the pupils to do better school work or whether it actually made the higher marks easier to get, it is evident that as a result of the course the pupils did superior academic work both qualitatively and quantitatively."—*H. J. P. Schubert* (Buffalo).

492. **Wahlstrom, E. L.** The computational arithmetic of social experiences of third grade children.

*J. educ. Res.*, 1936, 30, 124-129.—Studies made by 31 grade teachers under the direction of the Iowa State University. Children were asked to report social situations involving arithmetical computations from their own experience. 1687 problems were contributed. These are analyzed to determine the processes involved in their solution. The results indicate that, for the third grade, addition and subtraction are used almost to the exclusion of multiplication and division. Most of the problems were simple and involved only a single step in computation.—*S. W. Fernberger* (Pennsylvania).

493. **Walcott, F. G.** New methods and objectives in teaching dull-normal pupils to read. *Sch. Rev.*, 1906, May, 348-362.—The author presents the results of two experimental studies of the teaching of reading to pupils of normal and less than normal ability, from which he concludes that our present theories and practices will need to be frequently modified in effective classroom instruction of pupils of this type.—(Courtesy *J. educ. Res.*)

494. **Wilkins, W. L.** High school achievement of accelerated pupils. *Sch. Rev.*, 1936, April, 268-274.—The author presents the results from a study of 282 accelerated pupils in a midwestern city, concluding that when acceleration is practised wisely, i.e., with careful individual study including appraisal of physical, mental and educational growth, emotional stability and social maturity, the results from the standpoint of intellectual adjustment of the accelerated pupil will, in general, be good.—(Courtesy *J. educ. Res.*)

[See also abstracts 13, 80, 156, 176, 419, 446, 499.]

## MENTAL TESTS

495. **Flanagan, J. C.** A short method for selecting the best combination of test items for a particular purpose. *Psychol. Bull.*, 1936, 33, 603-604.—Abstract.—*R. H. Brown* (Yankton).

496. **Kinder, E. F.** Variations in performance on subtests of the Stanford-Binet scale of a group of Letchworth Village subjects retested over a six-year period. *Psychol. Bull.*, 1936, 33, 604-605.—Abstract.—*R. H. Brown* (Yankton).

497. **Marzi, A.** L'atteggiamento critico nella età evolutiva ed i reattivi di frasi assurde. (The critical attitude in ontogenetic development and reactions to absurd phrases.) *Riv. Psicol. norm. pat.*, 1936, 32, 77-90.—In order to study the development of critical ability, 20 absurd sentences, each with 3 or 4 qualifying statements, were presented to 257 subjects between 10 and 17 years old. The subjects were asked to check the qualifying statement that best explained the absurdity in each sentence. The results show that critical ability is not adequately developed until the age of 12, and even up to 17 a great many errors persist. The most difficult absurdity to understand is the purely logical and formal type. Some sex differences are indicated.—*T. M. Abel* (Trade Extension Classes, N. Y. C.)

498. **Scates, D. E.** Complexity of test items as a factor in the validity of measurement. *J. educ. Res.*,

1936, 30, 77-92.—A critical and theoretical paper in which the term "complexity" is defined as "the number of factors which enter into the response to a test item and the interrelationships which exist between these factors." The author points out that many such factors are operative in many of our present tests and that the failure to consider this situation makes these tests less adequate than they are believed to be.—S. W. Fernberger (Pennsylvania).

499. Wagner, R. P., & Hause, E. The constancy of the accomplishment quotient. *Sch. & Soc.*, 1936, 44, 351-352.—On two occasions, separated by approximately a year, the mental ages of 157 children were obtained by means of the McCall Multi-Mental test and the achievement ages by means of the New Stanford achievement test. The two series of obtained AQ's correlated .38. It is concluded that the AQ has little stability from year to year.—H. L. Koch (Chicago).

500. Wells, F. L., & Hylan, N. W. Psychometric practice in adults of superior intelligence. *Amer. J. Orthopsychiat.*, 1936, 6, 362-375.—Continuing their report of psychometric practice with adults, the writers discuss the use of the "reversed clock," the "ingenuity," and the "inverted forms" tests.—J. McV. Hunt (Brown).

[See also abstracts 19, 407, 421, 514.]

#### CHILDHOOD AND ADOLESCENCE

501. Aichhorn, A. Zur Technik der Kinderberatung. (The technique of counseling children.) *Z. psychoanal. Pädag.*, 1936, 10, 1-74.—Aichhorn presents an analysis of the attitudes of the clinical consultant that necessarily underlie successful handling of typical problem cases. His analysis of the family and wider social circumstances and of the consequent attitudes developed in children and parents is applicable regardless of psychological school. The applications are discussed in terms of psychoanalytic principles. Typical cases illustrate the procedures that will induce transference of libido to the consultant in order that they may be helped to such a reorganization of their personality traits as will make their strivings lead to emotional stability and desirable social adjustments. The treatment of both child and parents is considered. The attitudes and subtle personal influence of the consultant are stated to be more important than simplified verbal formulations of procedure.—O. N. de Weerd (Beloit).

502. [Anon.] Child neurology research. *Science*, 1936, 84, 368-369.—With a grant from the Friedsam Foundation a special council has been formed to stimulate research in child neurology and allied fields. The research is to be encouraged by stipend, scholarships or otherwise, and is to be national and international in scope. Bernard Sachs will be director and will be assisted by three other neuropsychiatrists, three pediatricians, one orthopedist and two laymen.—F. A. Mote, Jr. (Brown).

503. Bender, L., & Woltman, A. G. The use of puppet shows as a psychotherapeutic method for

behavior problems in children. *Amer. J. Orthopsychiat.*, 1936, 6, 341-354.—These writers describe the use of puppet shows for determining the psychological mechanisms in the emotional problems of children and for psychotherapeutic purposes. Hand puppets are employed because they are more direct in action, more convincing in movement, and capable of more aggressiveness than string marionettes. In retelling a play a child makes known his identifications. Because children do identify themselves and their siblings and parents with the puppet characters, the technique enables one to understand better (1) the problems of the child's love relationship with its parents and siblings, and (2) the problems of aggression by the child with anxiety, or aggression against the child with apprehension. For therapeutic purposes the technique is economical because it treats a group at one time; and it is superior to individual treatment because anxiety and guilt are more thoroughly released in the group and because children discuss more freely in groups than they will alone.—J. McV. Hunt (Brown).

504. Bridges, K. B. Le type émotionnel chez le jeune enfant. (Emotional type in the young child.) *Année psychol.*, 1934, 35, 158-166.—A special study was made of children whom hospital nurses or school teachers considered "nervous" or extremely emotional. Extremely diverse modes of behavior were shown. They are grouped under three general heads: those who act in an exaggerated emotional manner to the slightest stimulus; those who act in an inhibited fashion (especially shown in reactions of a physiological nature); and those who are "changeable" or "temperamental." There is evidence to support the theory that some of the individuals are more subject to a sympathetic-nervous reaction and others are disposed to parasympathetic reactions. The normal antithetical reactions become controlled through habits developed in early life. The habits of responding emotionally in definite ways are probably acquired early in life, determined by some constitutional predisposition. The tendency toward antithetical behavior (both mentally and physically) may be explained as evidence of the universal tendency toward equilibrium of function. Specific reactions which bring satisfaction to the child may become generalized. The hypersensitivity of the emotional child is not due to an exceptional sensory system, but is intensified by internal stimulation.—R. Goldman (Boston Psychopathic Hospital).

505. Childers, A. T. Some notes on sex mores among negro children. *Amer. J. Orthopsychiat.*, 1936, 6, 442-448.—The writer has found negro children of the lower class exceptionally free from restraint in telling of their sex lives. Living in homes where both parents work, they begin sex play as they do any other childish game of spontaneous origin, frequently at 5 or 6 years of age. In this setting perversions are extremely rare. The sex act is accepted casually, assuming approximately the significance of good fellowship. No discrimination against illegitimacy is found. Sex dreams are usually frank

and not particularly symbolic. Brother-sister incest does not appear, but children of the same family cooperate. Venereal disease is little feared, and illegitimate pregnancy is viewed with slight concern. Two case summaries of psychotic breakdowns are presented to illustrate what may happen when social and moral censorship is applied too strictly to children in whom the sex appetite has been developed.—*J. McV. Hunt* (Brown).

506. **Exarchopoulos, N.** [Report on scientific research at the laboratory of experimental pedagogy at the University of Athens during the years 1923-33.] *Prakt. Akad. Athen.*, 1934, 9, 38.—The researches reported include studies on physiological development, intelligence tests as related to race or social class, correlations of intelligence with different school subjects, and psychograms for various psychological aptitudes.—*H. E. Burr* (Ohio State).

507. **Fries, M. E.** The study of the emotional development of children. *Med. Wom. J.*, 1936, 43, 199-202.—*R. R. Willoughby* (Brown).

508. **Gerarda, S. M.** Étude de psychologie expérimentale. (A study in experimental psychology.) *Rev. Enseign. Pedag.*, 1935, 17.—A series of acts was judged by 2000 children as to whether they were good or bad. Effectiveness of moral judgment increased with age.—*H. E. Burr* (Ohio State).

509. **Gesell, A.** The developmental morphology of infant behavior pattern. *Proc. nat. Acad. Sci., Wash.*, 1932, 18, 139-143.—Behavioral development may be studied from the standpoint of morphological development. "The organization of the growing complex of infant behavior is faithfully revealed in outward forms of posture, of perceptual adjustment, prehension and adaptive manipulation." This development is "captured" by photography, which permits systematic recording and experimental analysis. The author presents an outline of the observational technique, a normative synopsis of infant prehension during the first year of life, and a description of the method of "coincident projection" of films representing different stages of development. Seven illustrations accompany the account.—*F. S. Keller* (Colgate).

510. **Hagino, G.** [A study on the temporal aspects of the facial expression.] *Jap. J. Psychol.*, 1936, 11, 363-380.—A study through film pictures of facial expression of emotion, including crying and laughing. The subject is a two-year-old boy. Crying has long and slow phases, but laughing occurs suddenly and vanishes quickly. English summary.—*R. Kuroda* (Keijo).

511. **Harms, E.** Struktur-psychologische Korrektur am Begriffe der infantilen Sexualität. (Structural-psychological correction of the concept of infantile sexuality.) *Z. Kinderpsychiat.*, 1936, 3, 50-60.—First instalment of an article which criticizes the Freudian theory of infantile sexuality from a standpoint designated as "structural-psychological." The fundamental error of the Freudian theory is the emphasis which the latter places on sexuality. Because of its one-sidedness it is deficient for understanding of life and for pedagogy and therapy. A pluralistic theory is needed which recognizes the most

important factors and drives of human life. The author suggests these three as the major factors in such a theory and develops their implications: biologic-sexual, neurologic-sensitive, and consciousness-mental. The development and integration of these factors as treated in the field of developmental psychology as well as the nature of these factors, studied by structural psychology, are important.—*D. Shakow* (Worcester State Hospital).

512. **Harms, E.** Struktur-psychologische Korrektur am Begriffe der infantilen Sexualität. (Structural-psychological correction of the concept of infantile sexuality.) *Z. Kinderpsychiat.*, 1936, 3, 88-90.—Last instalment of an article criticizing the Freudian theory of infantile sexuality.—*D. Shakow* (Worcester State Hospital).

513. **Horst, L. v. d.** Geestelijke en lichamelijke vorming. (Mental and somatic development.) *Ned. Tijdschr. Psychol.*, 1936, 4, 1-6.—The author stresses the dynamic relationship between the mental and bodily characteristics of the child and their parallel development. Postures expressive of attention, mental alertness, and fears are indicative of the trends of mental development in adults and children alike. In considering the personality both aspects must be taken into account. Child-training efforts too frequently overstress one or the other. The Montessori school loses sight of the need for social training broader than the relationships between children at school. Cultural values are not easily presented in their totality within the limits of school activities.—*O. N. de Weerd* (Beloit).

514. **Isaacs, S.** Testing the development of young children. *Ment. Welfare*, 1936, 17, 71-75.—*R. R. Willoughby* (Brown).

515. **Lewis, M. M.** Infant speech; a study of the beginnings of language. New York: Harcourt, Brace, 1936. Pp. xii + 335. \$4.00.—The development of language from the child's earliest vocal utterances to his acquisition of a meaningful vocabulary with a conceptual use and its perfection in conventional speech is discussed in detail. Former studies of Stern, Bühler, Preyer, Deville, Ament, Guillaume, Hoyer and Valentine, together with the author's detailed study of his own child from birth to three years of age, are the main sources of data. The chief distinction of his own observations is that each utterance of his child is described as a dynamic integral of its entire behavior with reference to the complete genetic history of intra-organic and environmental events. Language, as a form of behavior rather than an institution, is considered developmentally with reference to its emotive, referential and evocative functions. Emphasis is placed upon biological needs and affective states as determinants of the form and occurrence of language and conceptual thinking. A summary of developmental sequences is given in the appendix, including "the circumstances" eliciting each response.—*H. H. Jasper* (Brown).

516. **Luria, A. R.** The development of mental functions in twins. *Character & Pers.*, 1936, 5, 35-47.—Ratio of heredity to environment does not remain

constant as has been erroneously held. As mental functions proceed from the simple (e.g., elementary visual memory) to the complex (indirect verbal memory), the ratio changes in favor of non-genetic factors.—*M. O. Wilson* (Oklahoma).

517. **Mazurkiewicz, J.** *Quelques remarques sur la conscience et son evolution au cours de la vie humaine.* (A few comments on consciousness and its development during the life of the individual.) *Rev. Neurol. Psychiat., Praha*, 1936, **33**, 179-193.—Head's experiments led to the localization of the center of protopathic sensibility in the thalamus. The consciousness of the infant originates when this center is activated by an external or cenesthetic stimulus. The subcortical mechanisms have no possibility of evolution. Thus the development of the child's consciousness must depend on other mechanisms. These are located in the brain cortex, which is the place of new functional acquisitions in the individual's life (e.g., conditioned reflexes). The consciousness of unity and identity of the ego depends not only on the unity and identity of the body but on the phylogenetic (located subcortically) and ontogenetic (located cortically) mnemonic acquisitions. These acquisitions have a dynamic structure and thus an emotional quality. There can be no emotional continuity without emotional memory. The gap between the organic and the mental cannot be bridged without assuming the existence of memory for emotions. Otherwise it seems impossible to explain the evolution of consciousness in the life of the individual.—*Z. Piotrowski* (Columbia).

518. **McGraw, M. B., & Price, E. D.** *Plate glass test.* (Film.) New York: Normal Child Development Clinic, Columbia Medical Center, 1936. 450 feet, 16 mm. Price \$30.00.—The film shows the behavior of infants ranging in age from 6 to 19 months when placed in three test situations involving a plate glass. This series of pictures reveals the fallacy of rating children's performances in terms of end results or achievements. A multitude of factors must be evaluated in judging performances in any test situation. The length of the child's leg with respect to the plate glass, emotional perturbation, or inadequate perceptive abilities may determine the character of the child's behavior in any given test situation.—*M. B. McGraw* (Columbia).

519. **McGraw, M. B., & Weinbach, A. P.** *Quantitative measures of developmental processes in erect locomotion.* (Film.) New York: Normal Child Development Clinic, Columbia Medical Center, 1936. 300 feet, 16 mm. Price \$25.00.—The film has been edited to show a method for the study of erect locomotion. The unique feature of the method is its use of motion picture film as a measuring device in the analysis of gait. The manner of walking and footprints are photographed on the same film. Dots placed at selected points on the body yield curves showing the spatial movements of bodily members. Counting the frames involved in a particular movement offers a time measure of certain aspects of erect locomotion.—*M. B. McGraw* (Columbia).

520. **Miles, C. C., & Wolfe, L. S.** *Childhood physical and mental health records of historical geniuses.* *Psychol. Monogr.*, 1936, **47**, 390-400.—The study is concerned with the early years of 50 geniuses as reported in the second volume of the *Stanford Genetic Studies of Genius*. Their physical and mental health records were rated by each author separately; the agreement between the two ratings was fairly high. The distributions for the 50 individuals with respect to both physical and mental health were fairly normal. "When the mental health distribution is compared with one for unselected school children it appears that the geniuses do not show in childhood a larger percentage than the school children of ratable mental health deviations unfavorable in nature."—*K. F. Muenzinger* (Colorado).

521. **Montessori, M.** *L'enfant.* (The child.) (Trans. by G. J. Bernard.) Paris: Desclée & de Brower, 1936. Pp. 266.—In the first section the author describes the child and his role in society. In the second she discusses the new departures in education, such as the spiritual preparation of the teacher, the origins of method, repetition of exercise, free choice, the use of toys, silence, punishments and rewards, dignity, discipline, and the first steps in teaching. In the third part she describes infantile abnormalities and gives certain observations on the physical life and on intelligence in affection.—*M. H. Piéron* (Sorbonne).

522. **Moriya, M.** [An experimental study of introspection of pre-school children.] *Jap. J. exp. Psychol.*, 1936, **3**, 63-96.—Self-observations regarding chromatic and achromatic after-images, their form, clearness, periodicity, movement and contrast effect, ideational images, and mental events in reaction experiments were reported by 13 pre-school children aged from 2:4 to 6:6 and were checked with those of an adult person. It was concluded that the reliability of their introspections, especially concerning their description of after-images, can probably be confirmed. English summary.—*R. Kuroda* (Keijo).

523. **Pichon, E.** *Le développement psychique de l'enfant et de l'adolescent. Evolution normale, pathologie, traitement.* (The psychological development of the child and the adolescent. Normal development, pathology, and treatment.) Paris: Masson, 1936. Pp. 374. 45 fr.—The book is planned for use as a manual for physicians, psychologists, educators, and enlightened parents. Rules for training are given. In his introduction Pichon defines the psychological problems involved, the psychological nature of childhood, and the norms of the child's mental development. The five sections deal with the following subjects: methods of investigation and tests, normal psychological development, the educational problems involved, and the therapeutic treatment of disturbances in psychological development. Short bibliography.—*M. H. Piéron* (Sorbonne).

524. **Sakellariou, G. T.** *E emphanisis tes ebes en elladi.* (The appearance of puberty in Greek girls.) *Prakt. Akad. Athen.*, 1936, **11**, 232-238.—Using the questionnaire method, an investigation was made of

the onset of puberty in Greek girls. Results of questioning 1000 subjects between 12 and 21 years of age showed that puberty has its onset between the ages of 9 and 16. In comparison with Spanish, Italian, and American girls the Greek girl enters puberty earlier. Information concerning knowledge of puberty prior to its onset in the individual is also given.—*F. A. Mote, Jr. (Brown).*

525. Sakellariou, G. T. *E emphanisis tes ebes eis tous neous en elladi.* (The appearance of puberty in Greek boys.) *Prakt. Akad. Athen.*, 1936, 11, 297-304.—Using the questionnaire method, an investigation was made of the onset of puberty in Greek boys. Results of questioning 1000 subjects between 12 and 22 years of age showed that puberty has its onset between the ages of 12 and 16. These results agree with those of Baldwin in the U. S. A. A small correlation in favor of blonds was found when blonds and brunets were compared.—*F. A. Mote, Jr. (Brown).*

526. Schlesinger, E. *Die Beziehungen zwischen körperlicher Entwicklung, Konstitutionsform, Begabung und Charakter im Schulalter.* (The relationship among bodily development, bodily form, endowment and character during the school age.) *Z. Kinderpsychiat.*, 1936, 3, 42-50.—The second of two instalments of an article concerned with the relationship between bodily characteristics and powers on the one hand and intellectual ability and personality development on the other. The author finds a looser relationship between physique and personality than between the former and intellectual endowment. Specific personality characteristics are more frequent among the pyknics than in other types, being mainly of two kinds, slowness and idleness. The author could not find definitely, in these children, the relationship between asthenic habitus and schizoid personality and that between pyknic habitus and the cycloid personality, which Kretschmer reports in his adults. However, there are definite indications of relationship between body build and personality in children which fall in with Kretschmer's principles.—*D. Shakow (Worcester State Hospital).*

527. Sebek, J. *Pedologicky ustav v Praze. Zprava o cinnosti v roce 1935.* (The child guidance institute in Prague. Report for 1935.) *Rev. Neurol. Psychiat.*, Praha, 1936, 33, 87-94.—The institute serves chiefly as a mental hygiene bureau for the children of the Prague public school system. In the year 1935 there were 589 admissions (403 boys and 186 girls). The institute was organized by the city of Prague in 1911.—*Z. Piotrowski (Columbia).*

528. Sells, S. B. *Methodological study in the measurement of the interests of children.* *Psychol. Bull.*, 1936, 33, 602.—Abstract.—*R. H. Brown (Yankton).*

529. Seltzer, S. S. *A measure of the singing and rhythmic development of preschool children.* *J. educ. Psychol.*, 1936, 27, 417-424.—Rating scales of the singing and rhythmic development of preschool children were constructed according to the Thurstone method for constructing attitude scales. The final scale for singing development includes 42 statements

with their scale values determined by the ratings of 97 judges, some of whom were experienced in music at the preschool level. The scale values of the 44 statements in the scale for rhythmic development were similarly determined. The two scales are presented.—*A. W. Melton (Missouri).*

530. Simpson, B. *You can't train the intellect before it arrives.* *Sci. Mon.*, N. Y., 1936, 43, 346-357.—A popularly written account of the significance of inherited individual differences in ability.—*O. P. Lester (Buffalo).*

531. Stoddard, G. D., & Wellman, B. L. *A manual of child psychology.* New York: Macmillan, 1936. Pp. 117. \$1.00.—This is a study manual to accompany the authors' textbook *Child Psychology*. Some additional material is summarized, and questions on the text and exercises, together with additional bibliography, are given at the ends of the chapters.—*H. H. Jasper (Brown).*

532. Thom, D. A., & Winslow, D. C. *A follow-up study of 50 problem children with poor prognosis and 50 problem children with good prognosis.* *Bull. Mass. Dept. ment. Dis.*, 1935, 19, 24-37.—*R. R. Willoughby (Brown).*

533. Walton, W. E. *Empathic responses in children.* *Psychol. Monogr.*, 1936, 48, No. 213, 40-67.—The purpose of this investigation was to discover the development of empathy in children ranging from kindergarten through the twelfth grade and to determine the individual differences at these age levels. Four tests of the dual choice type were constructed, which involved the matching of words and lines, colors or pictures. The results show that the empathic response is present at the kindergarten level and exhibits a fairly uniform growth. Individual differences appear at all age levels. "Young children show a tendency to think in terms of pleasantness-unpleasantness, utilizing a dual type of response. Gradually they add other dimensions until a large range of responses is acquired."—*K. F. Muensinger (Colorado).*

534. Washburne, J. N. *The mental development of adolescents.* *Progr. Educ.*, 1936, 13, 240-245.—*R. R. Willoughby (Brown).*

535. Wernstedt, W. *Barnens själsliv.* (The mental life of the child.) Stockholm: Natur og Kultur, 1936.—The author of this book, which is a general guide and textbook for physicians, nurses, and parents, is a pediatrician. There are popular chapters on practically all phases of child mind and behavior and many references to the author's personal experiences both as a pediatrician and a father. Wernstedt bitterly regrets the general lack of psychological insight and training of Swedish teachers.—*M. L. Reymert (Mooseheart Laboratory for Child Research).*

536. Zeller, W. *Der erste Gestaltwandel des Kindes.* (The first Gestalt transformations of the child.) Leipzig: Barth, 1936. Pp. 46. RM. 2.70.—*G. F. J. Lehner (Brown).*

[See also abstracts 58, 135, 179, 191, 207, 238, 257, 273, 275, 286, 295, 305, 354, 371, 381, 383, 388, 392, 394, 395, 396, 399, 400, 497.]

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